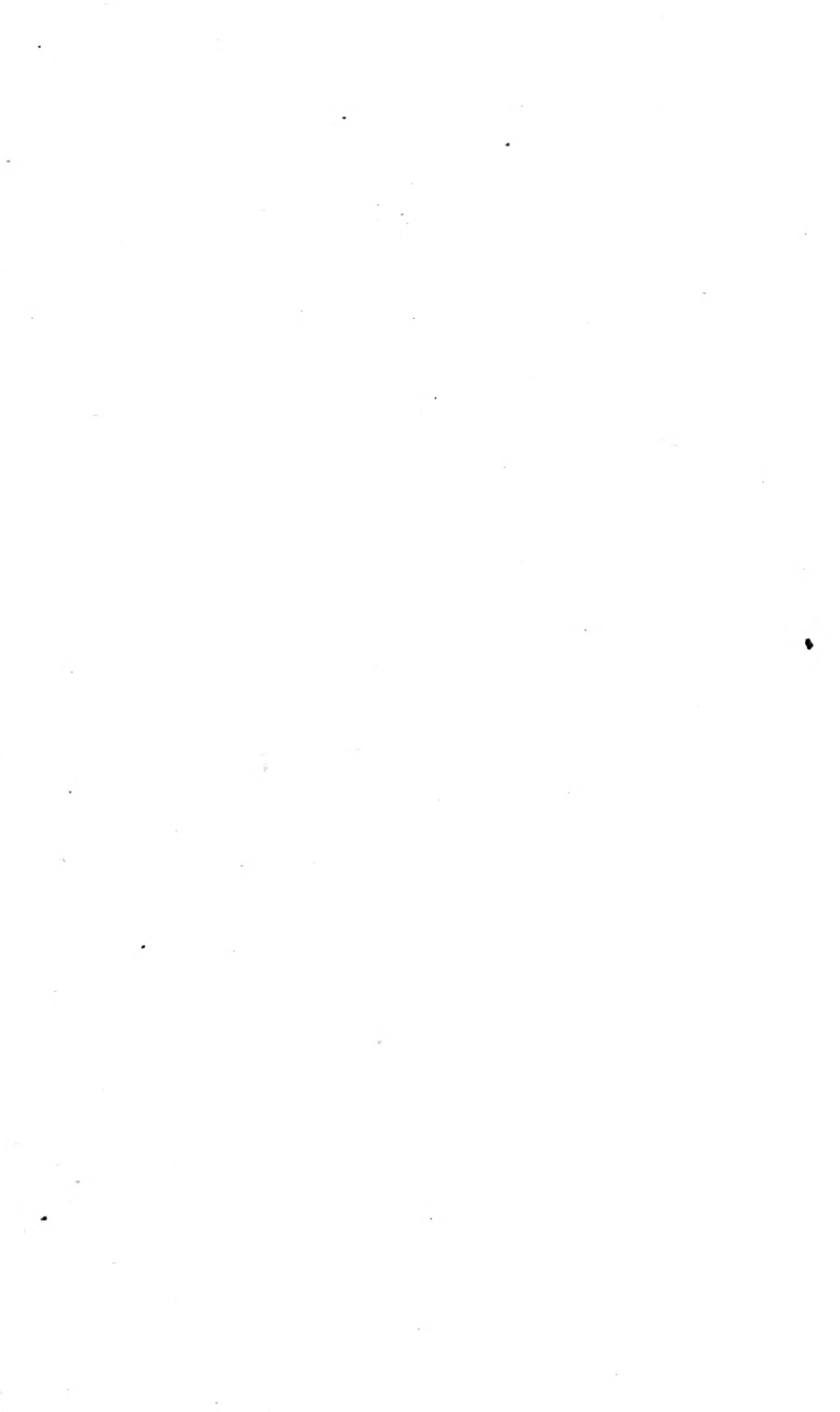
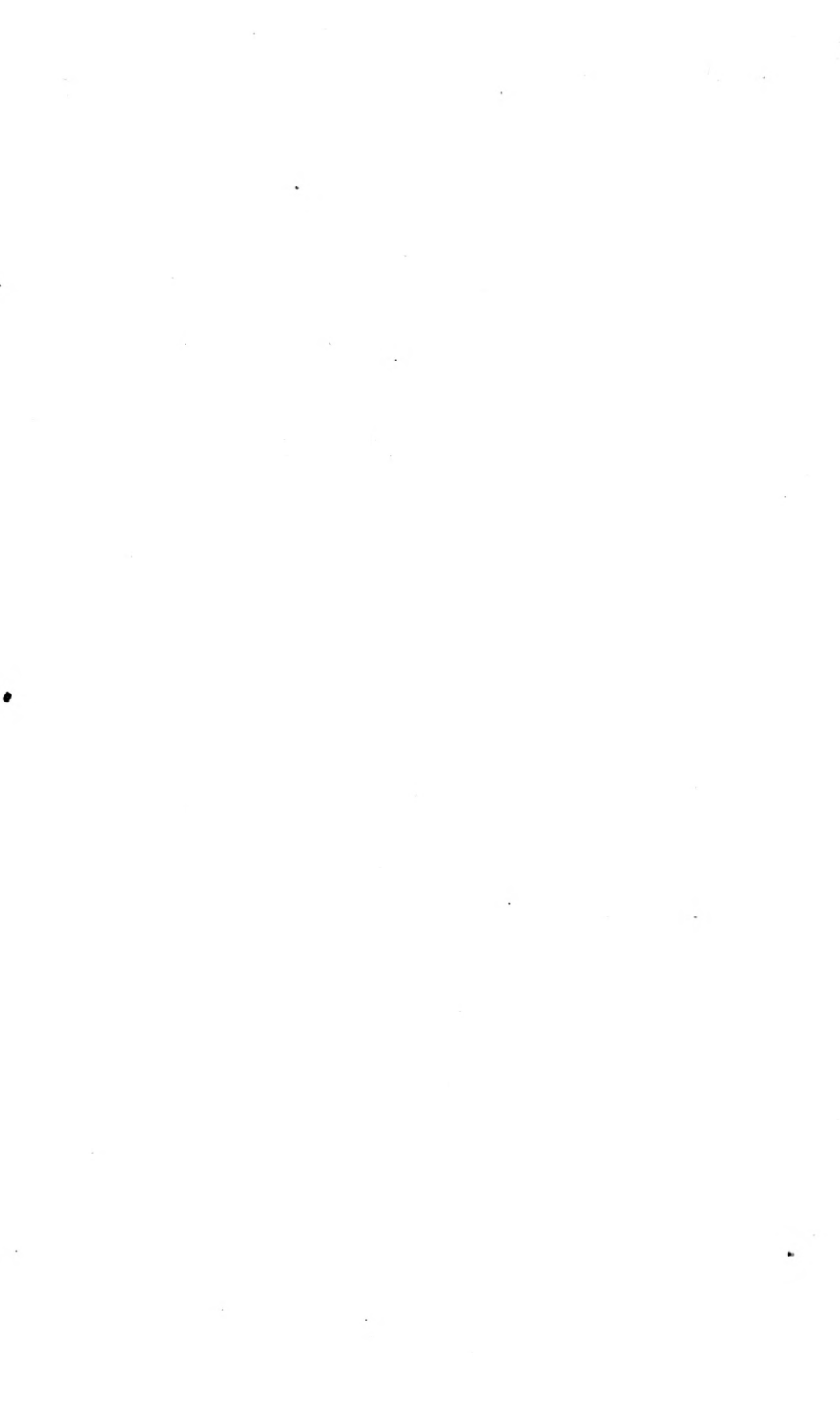


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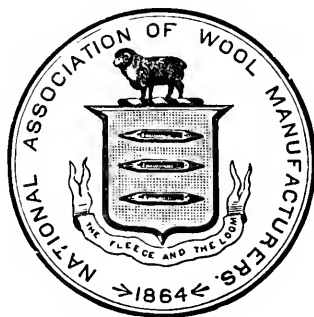




BULLETIN
OF THE
NATIONAL ASSOCIATION
OF
WOOL MANUFACTURERS,
1919.

FOUNDED NOV. 30, 1864.

EDITED BY PAUL T. CHERINGTON, *Secretary.*



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BULLETIN

OF THE

National Association of Wool Manufacturers

A QUARTERLY MAGAZINE

DEVOTED TO THE INTERESTS OF THE NATIONAL WOOL INDUSTRY.

VOL. XLIX.]

BOSTON, JANUARY, 1919.

[No. I.]

ANNUAL WOOL REVIEW

FOR 1918

WITH ESTIMATE OF DOMESTIC WOOL PRODUCTION
AND OTHER STATISTICAL RECORDS.

OUR ANNUAL WOOL REVIEW is presented herewith for the thirtieth year. The year 1917 was said to have been "a memorable one in the annals of wool growing and wool manufacturing"—because of the "entrance of the United States into the world-war." The year 1918 was no less memorable, for it was noticeable for the energy and loyalty which were displayed by growers, dealers, and manufacturers—all—in coming to the help of the Government in its emergency. Without stint or hindrance they have put their stocks, their mills, and themselves at the service of the Nation. And now, because of the sudden termination of the war and the consequent disorganization of business, the manufacturers find themselves with stocks of wool on hand unsuited to their ordinary business, many of their machines—altered to suit government necessities—unfitted for the manufacture of their usual products, and their help, accustomed to high war wages, in a state of unrest. In addition the public generally is looking for lower prices which can only be obtained by reducing raw material prices and manufacturing costs, of which wages form the most important element.

In the Review for last year attention was called to several propositions made by the wool dealers to the Government in regard to the taking over of all the wool of the country at a fixed price, which were rejected at the time. Later a price was finally fixed at 5 per

cent under the Boston Wool Trade valuations of July 30, 1917. The Government was given an option on all wool importations as of December 15, 1917, but did not avail itself of it until March, 1918, when it gave notice that the option would be applied upon all wools imported and grading 44s-56s inclusive, including some South American wools of lower grades. Mr. Charles J. Nichols, of Messrs. Hills & Nichols, was appointed Wool Administrator to take charge of the business. Shortly after Mr. Albert W. Elliott, of Jeremiah Williams & Company, went to Washington to assist the Quartermaster Department in the purchase of wool, and was appointed Chief of the Wool, Top, and Yarn Branch of the Clothing and Equipage Division.

Numerous other agents were designated to assist the Government in the work of handling, examining, and distributing the wool coming into official hands. In fact the wool trade of Boston became greatly disorganized in consequence of Government action and many houses were obliged to give up their usual business and entered temporarily into Government employ.

In July the War Trade Board named certain houses to act as buyers for the Government of South African and South American wools. This movement created much dissatisfaction in the trade, and in September Messrs. A. Koshland and John Wilcock were appointed as agents for the United States Government as buyers of wool in South America. These gentlemen immediately started on their mission, taking with them a suitable staff of assistants, but within a short time after their arrival in Buenos Aires, the signing of the armistice caused them to cease their work and to return home.

For several years past the National Association of Wool Manufacturers has conducted an inquiry as to the respective number of active and idle machines occupied in the United States wool manufacture. These statements, which of late were issued monthly, had come to be looked for with much interest by the trade, but in October the Bureau of Markets of the Department of Agriculture expressed a desire to take over this work and it has since been continued as an official inquiry and publication. It has been particularly valuable as showing the relations from month to month between not only the idle and the active machinery of the country, but also of machines employed on military and civilian work.

The propaganda for "More Sheep and More Wool" has been vigorously pursued and is producing results, especially in the Middle and Western States. Even New England shows signs of interest in the proposition. There can be no doubt but that the country as a whole needs large additions to its flocks of sheep both for food and industrial purposes. It is a shame that in the recent war this coun-

try has been to so great an extent dependent on foreign nations for an adequate supply of wool. If England had been our foe, our condition would have been indeed pitiable.

Government reports show an estimated increase of about 1,284,000 in the number of sheep and about 14,000,000 pounds increase in the wool product for the year. Other official reports account for the consumption in our mills during the first eleven months of the calendar year of 708,000,000 pounds of wool in its greasy condition, indicating a consumption for the full year of not less than 750,000,000 pounds. The ordinary yearly consumption is estimated at 600,000,000 pounds, so that despite the fact that work on civilian contracts was largely suspended, the mills have consumed for all purposes 25 per cent, or 150,000,000 pounds, in excess of their usual quantity.

With the lessened demand, arising from the reduction of Government requirements, the stock in Government hands, the quantity held by dealers and manufacturers, and the clip of 1919, which will soon be coming off, enough wool of all sorts and kinds, is in sight to supply the mills for the coming year—and nothing over. For further supplies our reliance is on foreign sources.

Our imports of wool manufactures for the ten months ending October 31, for the three last years, are as follows:

1916	\$14,013,689
1917	18,596,369
1918	20,663,173

The increase is owing partly to the constantly increasing value per unit of goods but mainly to a greatly increased importation of wearing apparel, which amounted to \$1,121,059 in the ten months of 1916, \$1,756,174 in 1917, and \$8,891,766 in 1918.

The imports of manufactures of wool entered for consumption for the three fiscal years 1916, 1917, and 1918 respectively are as follows: \$17,151,396, \$19,292,302, and \$27,334,539. In the three fiscal years before the Simmons-Underwood bill of 1913 these imports were—1911, 1912, and 1913—\$18,791,076, \$15,182,693, \$15,031,313, and in 1914, partly under the Payne-Aldrich law and partly under the Simmons-Underwood bill, they amounted to \$33,519,799. These last figures show clearly the effect of opening the door to foreign importations by this bill.

The exports of domestic wool manufactures during the last fiscal year equalled \$17,749,421, as compared with \$18,423,456 in 1917. These exports include \$3,301,125 in 1918 and \$4,452,258 in 1917, in value of wearing apparel.

NUMBER OF SHEEP.

The estimate of the wool product was made as in recent years by the United States Department of Agriculture. In making this estimate it has used the percentages of increase or decrease from the product of the previous year, reported by its correspondents. The Department has furnished extracts from these reports, though withholding the name of the writers. These reports supply a valuable insight into the methods pursued by the Department in ascertaining its results, which are checked up by other methods not stated. The final result is probably as near to the facts as can be obtained other than by an actual count under the supervision of the Census Bureau.

No attempt was made to ascertain the actual number of sheep sheared but, as was the case a year ago, the Department estimates the number of sheep by dividing the wool product of the State by the average weight per fleece. This method approximates the number of sheep of shearing age, viz.: 36,269,000 as against 35,347,000 a year earlier, but does not of course give the total number of sheep in the country, which appears from the Department's reports of January 1, 1918, to have been 48,900,000.

Portions of the reports of the agents of the Department are here reproduced, and will be of interest as indicating how the Department secures its information.

Reports of Field Agents on Wool.

NEW JERSEY. There has been an increase in wool production this season as the farmers are beginning to get better prices and are having less trouble from dogs.

PENNSYLVANIA. There is somewhat of a boom in the sheep raising industry in Pennsylvania at present due to more stringent dog laws, and the high price of wool and meat; consequently there was an increase in the number of sheep clipped this spring.

MARYLAND AND DELAWARE. Total production compared with that of a year ago shows an increase, more sheep being raised.

WEST VIRGINIA. Production undoubtedly increased, but movement slow because of confusion among farmers, dealers, buyers, et al., as to Government regulations, prices, etc.

NORTH CAROLINA. Total production compared with last year, about the same, although the number of sheep is increased by about 5%. Most all of the ewes of good quality have been retained, whereas previously they have been marketed by an overwhelming majority. Increased wool production has not been affected, however.

FLORIDA. Very few reports were received and I have very little confidence in the results shown.

A 5% increase in number of fleece, which my own investigations lead me to consider reasonable and about correct, would, with an increase in weight per fleece from 2.8 pounds a year ago, to 3.2 pounds this season, indicate a total production of 120% of 1917.

OHIO. Since sending in the comments on wool production in the State a few days ago I have been able to obtain the assessors' returns for the number of pounds shorn in 1917. This reached a total of 8,680,000 pounds in 1917 compared to 8,947,000 pounds shorn in 1916. The returns on the number of sheep show 1,490,000 this spring compared to 1,494,000 a year ago—practically no change. In view of the foregoing I believe that the amount of wool this year is practically the same as in 1917, that is if the assessors' returns are any indication. Returns from crop correspondents agree on number of sheep with assessors.

INDIANA. There were considerably more sheep clipped than last year and the fleece was somewhat heavier.

ILLINOIS. The number of sheep in this State is certainly larger than last year and the figure on wool production that I have given (105) is, I am sure, very conservative.

MICHIGAN. Total production compared with last year: There has been a marked increase in the number of sheep over last year. Many small flocks have been started and several large flocks have been brought from the western regions. Some of the latter were sheared before they reached this State. Under these changed conditions, a correct estimate is extremely difficult, but I am satisfied that there is an increase of 10% in the total production.

WISCONSIN. The returns from the correspondents indicate an increase of 1% over last year. I am quite sure that there is an increase of from 15% to 20% in the number of sheep in the State compared to last year and the same increase in the production of wool less the lower weight per fleece this year compared to last year.

MINNESOTA. While clip was not quite as large as last year, the increase in sheep has more than offset this. This together with the increase last year makes 112% for the two years, which seems to be at least conservative.

MISSOURI. Total production is surely greater than last year. More sheep are here. Lack of feed will run a few out this fall and winter, however.

SOUTH DAKOTA. The Chicago and Northwestern Railway Company shipped 1,262,000 pounds of wool from Bellefourche in 1918 as compared with 1,061,000 pounds shipped from that station in 1917. Newell, South Dakota, another rather important wool shipping station, shipped approximately 400,000 pounds of wool in 1918 as compared with about the same amount in 1917. These two stations are the center of wool industry in South Dakota. A variation indicated in that section would represent the change in range sheep. This increase would be approxi-

mately 25%. The more easterly portions of South Dakota raise sheep only in small bands under farm conditions. From all information which I can gather, the growth of these farm flocks has been even greater than under range conditions. If this is true, we are justified in placing the increase above 25%. It seems that the information gathered will justify 126 or 127% at least.

KENTUCKY. Production undoubtedly fully up to 1917 and usual, possibly a little more. Government regulations have caused confusion and consequent slow movement of wool.

TEXAS. The wool production for this year is less than that of 1917. The sheep and wool producing country centers on Tom Green county in west Texas and this whole section has been most adversely affected by the severe drought.

ARKANSAS. My information is not at all satisfactory. I know of individual instances where the clip this year ran over 8 pounds to the fleece through the introduction two or three years ago of pure bred rams. The figures from my aids I believe are too low. I believe the production was greater than that of a year ago inasmuch as there had been an increase in sheep. Our previously published figures of 4 9/10 pounds yield per fleece, together with an increase of 13% in the number of sheep, would give us a wool yield of 430,612 pounds, which is 23% increase over the figures of a year ago. Insomuch, however, as our aids, particularly in the 3d district, show a decrease I am submitting a more conservative figure of 115.

WYOMING. The production of wool according to the information gathered—there will be a slight increase compared with last year, and find from what inquiry I have made in the State, a slight increase in number principally in young sheep. All live stock are in good condition.

COLORADO. There has been a tendency upon the part of flock masters to increase their herds and to hold over ewe lambs. There has also been some increase in the number of sheep upon the farms in the way of small bands.

NEW MEXICO. Many sheep shipped from State on account of drought past year and the fleeces are lighter than usual, due to poor condition of sheep.

WASHINGTON. Total Production: Increased numbers of sheep and an unusually favorable open winter causing no break in the wool are responsible for the increased production of wool in this State.

CALIFORNIA. From special inquiries made I can say in advance of tabulation of reports that there has been a slight increase in production over 1917.

Special Reports of Field Agents.

MICHIGAN. I have found that the average weight per fleece for 1918 is greater than in 1917, due to the long and exceptionally cold winter. This increase is partially offset by the fact that some of the sheep imported into the State this year are below the average in quality and whose fleeces will not weigh up to the State average.

It is noted that the increase in number of sheep amounts to 14% over the number in the State one year ago. Probably the increase in the number sheared would not be quite as large, hence, I am using 12% which gives a total of 1,240,000 fleeces for 1918. If we allow 7.5 pounds per fleece, we have a total of 9,300,000 pounds as the total production for the current year, which I believe is a conservative figure.

WISCONSIN. I am estimating the wool production in Wisconsin at 2,812,000 pounds in 1918. I believe that the returns from the assessors to the Tax Commission represent almost exactly the number of sheep shorn in the State. In 1909 the assessors reported 615,568 sheep on farms, and the U.S. Census reported 4,261,995 pounds of wool. In 1917 the assessors reported 286,378 sheep, which multiplied by 7.9 pounds per fleece plus 30,000 sheep shorn at feeding yards and not included in the assessors' returns, gives a total production of almost 2,500,000 pounds of wool. According to the returns received in Washington from the assessors this year, there is an increase of 18% over last year. This would give us about 338,000 sheep which were shorn, plus 30,000 shorn at sheep yards, or about 378,000 sheep shorn in 1918, which with an average weight per fleece of 7.6 pounds, gives a total of 2,812,000 pounds.

MINNESOTA. According to returns 21 counties which are pretty well scattered over the State, as of May first, show an increase in sheep of practically 120% over last year. Using this and the same system as last year, gives me 3,209,000 pounds as total production for 1918.

IOWA. The figure of 4,600,000 pounds, as indicating the number of pounds of wool clipped during 1918, is submitted on the basis of the Bureau's report that the number of sheep on farms in the State July 1 is 2% greater than the number on farms July 1, 1917.

MISSOURI. From a perusal of the July estimate of sheep showing 24% increase and considering last February estimate, I am putting the number for this inquiry at 117% of this time last year. I hardly think we have increased the number 25%. It has increased sharply, however. The Farm Survey made last winter shows ewes to have increased 61% over 1917. That was upon 8,009 farms. I am basing my estimate now upon sheep being upon 82,200 of the 274,460 farms as estimated by me for Missouri this year. Of farms reporting whether they had sheep or not, there were 9.5 ewes to each farm. I estimate that there were 802,200 sheep shorn in Missouri this year, of which 20,000 were fed lambs shorn before shipping to market.

Sheep in some sections have gone to market during the drouth but not in the same volume as cattle.

NORTH DAKOTA. Sheep numbers have ranged from 240,000 to 252,000 for past three years, showing noticeable increase past two years. Farmers are becoming more interested annually especially since war prices of wool and mutton have prevailed. Sheep also becoming popular as a better farming proposition in aiding to clean up foul lands. Numerous farmers starting with small flocks especially in northeastern part of State. Weight per fleece this season—7.6 pounds. I believe sheep numbers have

been and still are carried slightly high on the Bureau's records for North Dakota.

NEBRASKA. Feel confident that we may expect a large increase in sheep and wool next year. A number of farmers are raising sheep in a small way and the results have been very satisfactory. Many who have had limited experience say there is more money in sheep than in other kinds of live stock.

KANSAS. Our last year's estimate of 1,450,000 pounds of wool in Kansas seems to me logical as it will show a clip of approximately 7.6 pounds on close to 190,000 sheep. I believe that I am fully justified in saying that this year's wool production is 20% larger than last and I am now recommending such an increase.

MISSISSIPPI. The weight per fleece has increased in the past year from 3.3 to 4.1 pounds. The heavy sales and consequent reduction in the size of flocks have been confined almost entirely to the small wild sheep of south Mississippi which gave minimum weight fleeces. The remaining sheep responded to better treatment with heavier fleeces.

In the other sections, where good breeds are grown and given attention, producing heavier fleeces, the number of sheep has increased. Thus, the average weight per fleece for the State has been increased by a reduction in the number of sheep with light fleeces, and an increase in the number with heavier fleeces, and by better care of the remaining sheep in the pine woods section.

LOUISIANA. Sheep men tell me that with every 1,000 adult sheep there will be found about 400 lambs too young to be sheared. Allowing for the lambs too young to be sheared, say 28.7%, of the total number of sheep and lambs (230,000), we have 164,000 sheep and lambs that were clipped. The best informed men lean to the opinion that 3.7 pounds is a fair weight per fleece for the adult sheep, and 3 pounds for the lambs old enough to be sheared. Owing to the very high price of wool, all lambs that are not too young were clipped last spring or early summer.

Hence we have the following:

147,600 adult sheep (90% of the total sheared)	
at 3.7 pounds per fleece.....	546,120 lbs.
16,400 lambs sheared (say 10% of the total	
number of sheep and lambs sheared) at 3	
pounds per fleece.....	49,200 lbs.
Total.....	595,320 lbs.

OKLAHOMA. The number of sheep is small in this State and the wool production not of great importance. All the sources of information indicate a trend towards an increased number of sheep, and now that the high prices of wool prevail there is also a tendency towards increasing the production of wool. The increased interest in wool production is surely as great, if not greater, than the increase in the number of sheep, that is, better care is probably being given wool now than formerly which could easily account for the difference in the average weight per fleece. Shipments have been more or less scattered and many farmers with small flocks hold their wool for two or three years, consequently it is not likely that all of one year's production would come into sight during the same year.

ARIZONA. It is the opinion of well-informed bankers, wool buyers, and growers that the production in Arizona this year will fall short from 3 to 5% of the 1917 production, due to smaller average fleece. Increase in sheep due to holding of spring lambs, which were not shorn this season.

IDAHO. Outside of the slight gain in weight per fleece, there are two factors which tend to increase wool production in this State this year over last year. First, many Idaho sheep are taken to the southern ranges in Utah and Nevada. The severe winter of 1916-17 did not admit of many of these sheep being brought back to this State for shearing. The winter of 1917-18, however, was very mild and practically all Idaho sheep were brought back to the home shearing ground. The second factor is that last winter there were some 200,000 ewe lambs held over in this State, by speculators, with the intention of selling them out of the shearing corral this last spring. Only a few bands of these yearlings have been sold, and there are probably 150,000 still remaining unsold. This number of ewes would add materially to the wool clip.

Figures furnished by the railroads indicate that there were some 667 cars of wool, approximating 21,300,000 pounds, shipped out of the State during the season of 1918; or an increase over last year of about 2,000,000 pounds. Allowing 4 pounds for the weight of the wool bag would leave 19,006,208 pounds of raw wool shipped out of the State in 1917.

OREGON. In connection with this matter of wool production there is a strong probability that the Oregon clip for 1919 will be considerably less than that of 1918. Owing to the very unfavorable growing season there is a great shortage of hay in the sheep raising section and it will be necessary for many of the Oregon sheep to be moved out of the State for wintering during the coming feeding season. It is probable that a considerable number of these animals will find their way to the farms of Kansas, Nebraska, Iowa, and other Middle West points. A considerable number will be moved to the State of Idaho to be wintered on alfalfa hay, and it is a question as to what percentage of these animals may be returned to Oregon before shearing time next year.

Reports of the various County Assessors to the State Tax Commission indicate a total of 1,417,727 head of sheep on March 1, 1916, and a total of 1,416,094 head on March 1, 1917. Assessors' figures for 1918 are not yet available but in view of the slight change in numbers during 1916 and 1917 it would seem logical to presume that the number for March 1, 1918, would be approximately the same or possibly a few less than for the years 1916 and 1917.

UTAH. Wool dealers here say the Utah production varies between fourteen and sixteen million pounds with last year poor and this good. No figures bearing on weight per fleece were obtainable.

Stockmen generally say there are 1,250,000 to 1,500,000 sheep in the State. The largest wool company in the State put the total production as the same both years and just under 8,000,000 pounds. They also said the average clip was 7.0 pounds in 1917 and 6.5 in 1918.

The figures show an increase of 932,000 head of sheep sheared, the present number being estimated as 36,269,000. Other Department reports, giving the livestock of the country as of January 1 of each year, show an increase in the number of sheep and lambs of 1,284,000, from 47,616,000 on January 1, 1917 (revised figures), to 48,900,000 on January 1, 1918. Allowance has to be made for winter losses by disease and exposure, and the slaughter for food during the interval before shearing; and also for sheep too young to be shorn, so that the actual difference between the total number and the number for shearing is not disproportionate.

The Department's estimate of the shrinkage of wool from the grease to the scoured state, which is confirmed by commercial experience in most cases, is generally followed in the table, although in a few instances the practically unanimous opinion of dealers and others handling the clip has been substituted. A statement of the scoured equivalent of the wool product based upon the estimated shrinkage in each State and for the country, and also the value per scoured pound on October 1 in Boston, with the total value of the year's clip, is included in the Table of Production.

The tendency toward raising sheep producing mutton as well as wool continues, and is an important feature in our wool industry, for although merino sheep cannot be dispensed with as the foundation of our flocks, and its pure fleece is of the utmost value for many purposes, yet the constantly increasing demand for sheep meat, and for the medium and coarser wools for manufacture, adds greatly to the income of the sheep raiser, and affords encouragement to the belief in the eventual establishment in the United States of a sheep industry adequate to supply our needs for that kind of food, and for a wool supply sufficient for the clothing of our people, thus rendering us so far independent of foreign sources.

THE WOOL PRODUCT OF 1918.

From the statements set forth in the Table of Production it appears that the total product of sheared wool in this country for the year 1918 was 257,921,000 pounds, and that the total product of pulled wool was 42,000,000 pounds, making an aggregate production of raw wool of 299,921,000 pounds. The average shrinkage of sheared wool in the year 1918 was 60.8 per

WOOL PRODUCT OF THE UNITED STATES. — 1918.

States.	Quality.	Estimate of U. S. Department of Agriculture.			Per cent of Shrinkage.	Equivalent Quantity of Scoured Wool.	Average Value per Scoured Pound, Oct. 1.			Total Value, 1918.	States.
		Number of Fleeces.	Average Weight per Fleece.	Raw Wool Product.							
							1916.	1917.	1918.		
			Pounds.	Pounds.		Pounds.	Cents.	Cents.	Cents.		
Maine.....	10% fine, 90% medium	132,000	6.7	883,000	42	512,140	80	135	135	\$691,389	Maine.
New Hampshire.....	5% fine, 55% medium	27,000	7.0	192,000	43	109,440	78	134	134	146,650	New Hampshire.
Vermont.....	20% " 80% "	92,000	6.2	663,000	48	344,760	81	140	140	482,604	Vermont.
Massachusetts.....	Medium.....	20,000	6.0	119,000	42	69,020	80	135	135	93,177	Massachusetts.
Rhode Island.....	" " " "	4,000	6.0	24,000	41	14,160	80	125	135	19,116	Rhode Island.
Connecticut.....	" " " "	14,000	5.5	76,000	41	44,840	80	135	135	60,534	Connecticut.
New York.....	30% fine, 70% medium	547,000	7.0	3,830,000	49	2,053,300	85	145	145	2,977,285	New York.
New Jersey.....	Medium.....	16,000	5.5	88,000	41	51,920	85	145	145	75,284	New Jersey.
Pennsylvania.....	60% fine, 40% medium.	713,000	6.7	4,774,000	51	2,339,260	87	152	152	3,555,475	Pennsylvania.
Delaware.....	Medium.....	5,000	5.7	31,000	44	18,220	89	135	135	29,092	Delaware.
Maryland.....	" " " "	133,000	5.8	773,000	41	456,070	80	135	135	607,505	Maryland.
West Virginia.....	75% fine, 25% medium.	544,000	5.2	2,830,000	50	1,415,500	87	152	152	2,150,800	West Virginia.
Kentucky.....	Medium.....	624,000	4.9	3,058,000	39	1,865,380	80	135	135	2,518,263	Kentucky.
Ohio.....	65% fine, 35% medium	1,726,000	7.3	12,600,000	53	5,922,000	86	150	150	8,883,000	Ohio.
Michigan.....	25% " 75% "	1,184,000	7.4	8,765,000	50	4,382,500	85	145	115	6,354,625	Michigan.
Indiana.....	Medium.....	671,000	7.1	4,765,000	45	2,620,750	80	135	135	3,538,013	Indiana.
Illinois.....	10% fine, 90% medium.	506,000	8.0	4,048,000	49	2,064,480	81	137	137	2,828,328	Illinois.
Wisconsin.....	5% " 95% "	375,000	7.6	2,850,000	46	1,311,000	80	135	135	1,769,850	Wisconsin.
Minnesota.....	5% " 95% "	421,000	7.4	3,112,000	50	1,556,000	78	130	130	2,022,800	Minnesota.
Iowa.....	10% " 90% "	642,000	7.5	4,815,000	50	2,407,500	80	135	135	3,250,125	Iowa.
Missouri.....	5% " 95% "	730,000	7.0	5,102,000	45	3,042,600	80	134	134	4,077,084	Missouri.
		9,186,000	6.95	63,828,000	49.0	32,600,410				\$46,126,959	
Virginia.....	Medium.....	408,000	4.7	1,918,000	38	1,189,160	81	137	135	\$1,605,366	Virginia.
North Carolina.....	" " " "	142,000	4.0	570,000	42	330,600	75	132	122	403,322	North Carolina.
South Carolina.....	" " " "	26,000	4.0	103,000	42	59,740	75	132	122	72,883	South Carolina.
Georgia.....	" " " "	165,000	2.9	478,000	42	277,240	76	122	122	338,233	Georgia.
Florida.....	" " " "	123,000	3.2	426,000	42	247,080	75	132	122	301,438	Florida.
Alabama.....	" " " "	105,000	3.5	368,000	41	217,120	75	132	122	264,886	Alabama.
Mississippi.....	" " " "	155,000	4.0	619,000	41	365,210	75	132	122	445,556	Mississippi.
Louisiana.....	" " " "	161,000	3.7	594,000	44	332,640	75	132	122	405,821	Louisiana.
Arkansas.....	" " " "	82,000	4.0	402,000	44	225,120	74	120	130	292,656	Arkansas.
Tennessee.....	" " " "	425,000	4.6	1,954,000	41	1,152,860	78	134	130	1,498,718	Tennessee.
		1,802,000	4.12	7,432,000	50.2	4,396,770				\$5,628,889	
Kansas.....	Fine, fine med., and medium	214,000	7.6	1,624,000	63	600,880	85	150	150	\$901,320	Kansas.
Nebraska.....	" " " "	217,000	7.8	1,696,000	64	610,560	85	150	150	915,840	Nebraska.
South Dakota.....	" " " "	641,000	7.4	4,747,000	60	1,938,800	83	152	152	2,886,176	South Dakota.
North Dakota.....	" " " "	205,000	7.6	1,560,000	63	577,200	83	150	150	865,800	North Dakota.
Montana.....	" " " "	2,847,000	8.2	23,342,000	64	8,403,120	86	155	155	13,024,836	Montana.
Wyoming.....	" " " "	4,051,000	8.4	34,026,000	63	11,228,580	85	153	153	17,179,727	Wyoming.
Idaho.....	" " " "	2,468,000	7.9	19,500,000	63	7,215,000	85	153	153	11,038,950	Idaho.
Washington.....	" " " "	640,000	8.6	5,504,000	62	1,706,240	84	151	151	2,576,422	Washington.
Oregon.....	" " " "	1,562,000	8.0	12,500,000	67	4,125,600	85	156	156	6,435,000	Oregon.
California.....	33% fall, 67% spring	1,792,000	7.0	12,545,000	64	4,526,200	83	150	150	6,789,300	California.
Nevada.....	Fine, fine med. and medium	1,429,000	7.0	10,000,000	70	3,000,000	85	153	150	4,500,160	Nevada.
Utah.....	" " " "	2,052,000	7.7	15,800,000	65	5,530,000	84	151	151	8,559,000	Utah.
Colorado.....	" " " "	1,404,000	8.2	9,261,000	63	3,426,570	85	150	150	5,143,855	Colorado.
Arizona.....	" " " "	927,000	6.1	5,656,000	65	1,979,000	85	153	153	3,028,788	Arizona.
New Mexico.....	" " " "	3,059,000	5.6	17,132,000	68	5,482,240	83	150	150	8,223,560	New Mexico.
Texas.....	25% fall, 75% spring	1,007,000	7.0	11,250,000	63	3,712,500	82	150	150	5,568,750	Texas.
Oklahoma and Indian Territory.....	Fine, fine med. and medium	76,000	6.8	518,000	63	191,660	82	150	150	287,490	Oklahoma.
		25,281,000	7.30	186,661,000	65.6	64,214,150				\$97,711,914	
Totals.....		36,269,000	7.11	257,921,000	60.8	101,211,290	84.6	\$1.482	\$1.486	\$149,467,562	Totals.
Pulled Wool.....				29,400,000	30	29,400,000	75.5	1.507	1.52	44,692,000	Pulled Wool.
Total Product, 1918.....				229,921,000		130,611,290	82.5	\$1.487	\$1.487	\$194,159,762	Total Product, 1918.
							37.4*	.673*	.647*		
							29.4†	.539†	.561†		

* Equivalent value, unwashed

† Farm value as estimated by the Department of Agriculture

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cent, making the scoured equivalent of this sheared wool 101,211,290 pounds. The average shrinkage of pulled wool, from the brushed to the scoured state, was 30 per cent, making the scoured equivalent of the pulled wool 29,400,000 pounds — so that of the aggregate wool product, including both sheared wool and pulled wool, 299,921,000 pounds, the scoured equivalent was 130,611,290 pounds. The total value of the sheared wool, on the scoured basis and calculated on the value October 1, for the year 1918, was \$149,467,762, and the value of the pulled wool was \$44,692,000, making the total value of our wool product \$194,159,762.

COMPARED WITH 1917.

The total product of sheared wool in this country for the preceding year, 1917, was 245,573,000 pounds, and the total product of pulled wool was 40,000,000 pounds, making the aggregate production of raw wool for 1917, 285,573,000 pounds. The average shrinkage of sheared wool in the year 1917 was 59.2 per cent, making the scoured equivalent of the sheared wool 100,270,055 pounds. The average shrinkage of pulled wool, from the brushed to the scoured state, was 30 per cent, making the scoured equivalent of the pulled wool 28,000,000 pounds — so that of the aggregate wool product in 1917, including both sheared wool and pulled wool, of 285,573,000 pounds, the scoured equivalent was 128,270,055 pounds. The total value of the sheared wool for the year 1917 was \$148,569,672, and the total value of the pulled wool was \$42,190,000, making the total value of our wool product for that year \$190,759,672. The aggregate wool product of the United States on the raw wool basis is 14,348,000 pounds more in 1918 than in 1917, and on the scoured basis 1,180,235 pounds.

Following is a brief tabular statement of the wool product figures for the three years 1916, 1917, and 1918:

	1916.	1917.	1918.
Sheared wool.....	244,890,000	245,573,000	257,921,000
Pulled wool	43,600,000	40,000,000	42,000,000
Total raw wool	288,490,000	285,573,000	299,921,000
Scoured equivalent	130,755,750	129,431,055	128,270,000
Value of sheared wool	\$84,747,236	\$150,135,672	\$149,467,762
Value of pulled wool	\$23,042,000	\$42,190,000	\$44,692,000
Total value of wool product.	\$107,789,236	\$192,325,672	\$194,159,762

Pulled Wool.

The United States Department of Agriculture estimates the production of pulled wool for this year at 42,000,000 pounds, which is 2,000,000 pounds more than its estimate for last year. The shrinkage from the brushed to the scoured state, averaging 30 per cent, makes the scoured equivalent 29,400,000 pounds. This quantity may be divided into qualities as follows :

Fine and fine medium	16,000,000 pounds.
Medium and coarse.....	13,400,000 “

These quantities subdivided into the current market grades, with average values based on the price October 1, give the following results :

	Pounds Scoured.	Value per Pound.	Total Value.
Extra and fine A	4,200,000	\$1.75	\$7,350,000
A super	6,600,000	1.60	10,560,000
B super	6,300,000	1.46	9,198,000
C and low super.....	1,570,000	1.15	1,805,500
Fine combing.....	4,515,000	1.65	7,449,750
Medium combing.....	3,150,000	1.50	4,725,000
Low combing	2,415,000	1.25	3,018,750
Shearlings	650,000	.90	585,000
	29,400,000	Average \$1.52	\$44,692,000

VALUE OF THE CLIP.

The gross value of the wool product, both fleece and pulled, for the year, based on its scoured value in Boston in the early days of October, is as follows :

Fleece wool.....	\$149,467,762
Pulled wool.....	44,692,000
Total	\$194,159,762

This increase of \$3,400,090 over the corresponding value for last year is due to the increase in the quantity of wool produced, for the average value per pound both in the greasy or scoured condition figures out slightly less than in the previous year.

In the first group of States, as arranged in the table, the wools were worth \$46,126,959, or 30.8 per cent of the total value of the fleece wool. The second group produced wool to the value of \$5,628,889, or nearly 3.8 per cent of the total, while in the third group the value is \$97,711,914 or 65.4 per cent of the whole.

WEIGHT AND SHRINKAGE.

For a series of years the average weight and shrinkage for the whole country has been as follows:

	Average Weight.	Average Shrinkage.
	<i>Pounds.</i>	<i>Per cent.</i>
1901.....	6.33	60.6
1902.....	6.50	60.0
1903.....	6.25	60.8
1904.....	6.50	61.6
1905.....	6.56	61.3
1906.....	6.66	61.8
1907.....	6.60	60.6
1908.....	6.70	60.5
1909.....	6.80	60.9
1910.....	6.70	60.0
1911.....	6.98	60.4
1912.....	6.82	59.3
1913.....	6.95	60.0
1914.....	6.76	59.2
1915.....	6.80	58.5
1916.....	6.86	59.1
1917.....	6.95	59.2
1918.....	7.11	60.8

The average yield of clean wool per pound this year is practically the same as in the other years shown in the above table, and equals slightly over 39 pounds to the hundred.

The next table presents a statement of the production of wool for a series of twenty-eight years with the annual increase or decrease, and the one following it gives the production for the same period reduced to the scoured equivalent, as shown in our yearly estimates.

FLEECE AND PULLED WOOL, WASHED AND IN THE GREASE.

	Product.	Decrease.	Increase.
1891..... pounds	307,401,507	2,073,349	.....
1892..... "	333,018,405	.....	25,606,898
1893..... "	348,538,138	.....	15,519,733
1894..... "	325,210,712	23,327,426	.....
1895..... "	294,296,726	30,913,986	.....
1896..... "	272,474,708	21,822,018	.....
1897..... "	259,153,251	13,321,457	.....
1898..... "	266,720,684	.....	7,567,433
1899..... "	272,191,330	.....	5,470,646
1900..... "	288,636,621	.....	16,445,291
1901..... "	302,502,382	.....	13,865,707
1902..... "	316,341,032	.....	13,838,650
1903..... "	287,450,000	28,891,032	.....
1904..... "	291,783,032	.....	4,333,032
1905..... "	295,488,438	.....	3,705,406
1906..... "	298,715,130	.....	3,426,692
1907..... "	298,294,750	.....	948,176
1908..... "	311,138,321	.....	12,833,571
1909..... "	328,110,749	.....	16,972,428
1910..... "	321,362,750	6,747,999	.....
1911..... "	318,547,900	2,814,800	.....
1912..... "	304,043,400	14,504,500	.....
1913..... "	296,175,300	7,868,100	.....
1914..... "	290,192,000	5,983,300	.....
1915..... "	288,777,000	1,415,000	.....
1916..... "	288,490,000	287,000	.....
1917..... "	285,573,000	2,917,000	.....
1918..... "	299,921,000	.....	14,348,000

Beginning with the year 1914 the estimates are those of the United States Department of Agriculture. The wool product for the year 1918 shows an increase of 14,348,000 pounds from the original statement by the Department. The Department has increased the pulled wool figures by 2,000,000 pounds. It makes the fleece wool product for 1918, 257,921,000 pounds, and the pulled wool 42,000,000 pounds.

SCOURED WOOL, FLEECE AND PULLED.

	Product.	Decrease.	Increase.
1891..... pounds	139,326,703	301,517	.....
1892..... "	145,300,318	.....	5,973,615
1893..... "	151,103,776	.....	5,803,458
1894..... "	140,292,268	10,811,508	.....
1895..... "	125,718,690	14,573,578	.....
1896..... "	115,284,579	10,434,111	.....
1897..... "	111,365,987	3,918,592	.....
1898..... "	111,661,581	.....	295,594
1899..... "	113,958,468	.....	2,296,887
1900..... "	118,223,120	.....	4,264,652
1901..... "	126,814,690	.....	8,591,570
1902..... "	137,912,085	.....	11,097,395
1903..... "	124,366,405	13,545,680	.....
1904..... "	123,935,147	431,258	.....
1905..... "	126,527,121	.....	2,591,974
1906..... "	129,410,942	.....	2,883,821
1907..... "	130,359,118	.....	948,176
1908..... "	135,360,648	.....	5,001,530
1909..... "	142,223,785	.....	6,863,137
1910..... "	141,805,813	417,972	.....
1911..... "	139,896,195	1,809,618	.....
1912..... "	136,866,652	3,029,543	.....
1913..... "	132,022,080	4,844,572	.....
1914..... "	131,840,680	.....	613,600
1915..... "	131,987,960	.....	147,280
1916..... "	130,755,750	1,232,210	.....
1917..... "	129,431,055*	.....	1,324,695
1918..... "	130,611,290	.....	1,180,235

* Revised figures.

VALUE OF THE WOOL PRODUCT FOR TEN YEARS.

The total value of the wool product for the year, estimated on the scoured price in Boston, October 1, was \$194,159,672 for 130,611,290 pounds of clean wool. Last year 128,270,055 pounds were valued at \$190,759,672. The average value per scoured pound of the fleece wool is \$1.486 and \$1.52 for pulled wool in clean condition.

	Fleece and pulled. Scoured.	Total value.	Value per pound.	
			Fleece.	Pulled.
	<i>Pounds.</i>		<i>Cents.</i>	<i>Cents.</i>
1906	129,410,942	\$79,721,383	63.8	54.3
1907	130,359,118	78,263,165	62.3	50.2
1908	135,360,648	61,707,516	46.6	41.6
1909	142,223,785	88,829,746	63.6	58.0
1910	141,805,813	72,489,838	51.0	51.75
1911	139,896,195	66,571,337	47.7	47.5
1912	136,866,652	76,020,229	55.2	56.0
1913	132,022,080	57,582,954	43.6	43.4
1914	131,840,680	66,731,237	50.6	46.9
1915	131,987,960	85,200,954	65.7	60.5
1916	130,755,750	107,789,236	84.6	75.5
1917	129,431,055	190,759,672	148.2	150.7
1918	130,611,290	194,159,762	148.7	152.0

AVAILABLE SUPPLIES, 1913-1918.

An estimate of the available wool supplies for the year 1918, that is, the clip of the year, imports to October 1, and stock held by dealers January 1, 1918, but not including stocks held by manufacturers, either in store or at the mills, follows. The corresponding figures for a series of years are included in the table, which is based on the Boston Commercial Bulletin's estimate of supplies in dealers' hands, the Department of Commerce figures of imports, and the preceding tables.

AVAILABLE SUPPLIES.

	1913.	1914.	1915.	1916.	1917.	1918.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
Wool clip, fleece and pulled . .	296,175,300	290,192,000	288,777,000	288,490,000	285,573,000	299,921,000
Domestic wool on hand January 1	66,457,818	64,483,155	54,347,785	89,188,467	58,133,380	59,186,612
Foreign wool on hand January 1	17,002,537	28,550,094	53,579,973	12,903,962	20,672,104	30,411,548
In bond January 1	55,666,626	*2,257,505	*1,092,457	*2,064,474	*2,748,955	*574,723
Foreign wool imported, January 1 to July 1	92,088,202	187,933,386	221,454,523	357,949,002	281,131,296	239,266,683
Total . . .	527,390,483	573,416,122	619,251,738	750,595,905	648,258,735	629,360,566
Imports of wool, July 1 to Oct. 1,	22,736,792	51,157,044	73,886,311	45,671,006	83,417,357	141,211,062
Total to Oct. 1	550,127,275	624,573,166	693,138,049	796,266,911	731,676,092	770,571,628

* Mohair, alpaca, etc.

The imports of wool in October, 1918, amounted to 50,087,541 pounds, as compared with 10,728,407 pounds in October, 1917.

The gross imports for the four months ending October 31, 1918, were as follows:

1918.	Class I.	Class II.	Mohair, etc.	Class III.	Total.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
July	22,986,328	684,182	90,139	7,230,398	30,991,047
August	18,415,851	6	110,808	6,970,291	25,496,956
September	26,280,113	79,975	147,810	8,127,620	34,635,518
October.....	42,155,118	40,875	1,398,239	6,493,309	50,087,541
Total	109,837,410	805,038	1,746,996	28,821,618	141,211,062

For the corresponding four months of the four preceding years the imports were:

	Class I.	Class II.*	Class III.	Total.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
1914.....	31,517,805	12,019,833	19,576,136	63,113,774
1915.....	62,162,927	10,737,667	33,551,354	106,451,948
1916.....	34,731,155	5,708,869	13,510,129	53,950,153
1917.....	65,883,543	9,638,867	18,623,354	94,145,764

* Including mohair, alpaca, etc.

THE ANNUAL WOOL SUPPLY.

The quantity of wool retained for consumption in the United States from 1890 to date is shown in the following table. As the wool clip of the year reaches the market during the governmental fiscal year, the clip of a calendar year is added to the imports of the fiscal year and thus the supply of new wool available for the year is clearly indicated—to illustrate, the clip of the year beginning January 1, 1890, is added to the imports of the fiscal year 1890–91, which began six months later, on July 1, 1890.

18 NATIONAL ASSOCIATION OF WOOL MANUFACTURERS.

WOOL PRODUCED, IMPORTED, EXPORTED, AND RETAINED FOR CONSUMPTION.

Fiscal Year.	Total Imports.	Exports, Domestic and Foreign.	NET IMPORTS.		Production.	Retained for Consumption.	FINE WOOL.	
			Classes I. and II.	Class III.			Retained for Consumption.	Per cent of Foreign.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	
1890-91..	129,303,648	2,930,045	36,783,501	89,882,024	309,474,856	435,848,459	345,966,435	10.63
1891-92..	148,670,652	3,210,019	53,350,167	92,312,922	307,101,507	452,562,140	360,249,218	14.81
1892-93..	172,433,838	4,310,495	46,189,082	122,026,119	333,018,405	501,141,748	379,115,629	12.18
1893-94..	55,152,585	6,497,654	7,167,380	42,007,798	348,538,138	397,193,069	355,185,271	2.02
1894-95..	206,081,890	6,622,190	98,388,318	105,402,507	325,210,712	524,722,428	419,319,921	23.46
1895-96..	230,911,473	12,972,217	126,966,355	97,918,882	294,296,726	512,235,982	414,317,100	30.64
1896-97..	350,852,026	8,700,598	235,282,735	112,141,457	272,474,708	614,626,136	502,485,908	46.84
1897-98..	132,795,302	2,625,971	47,480,033	82,810,437	259,153,251	389,322,582	306,512,145	15.50
1898-99..	76,736,209	14,095,335	3,349,870	60,947,423	266,720,684	329,361,558	268,387,135	1.25
1899-1900	155,918,455	7,912,557	44,680,424	105,525,783	272,191,330	420,197,228	314,671,445	14.20
1900-01..	103,583,505	3,790,067	32,865,844	67,127,159	288,636,621	388,430,059	321,602,465	10.10
1901-02..	166,576,966	3,227,941	69,315,286	93,842,199	302,502,382	465,851,407	371,694,390	18.65
1902-03..	177,137,796	3,511,914	54,747,533	119,397,268	316,341,032	489,966,914	370,569,646	14.63
1903-04..	173,742,834	3,182,803	55,999,545	114,880,236	287,450,000	458,010,031	345,129,795	16.22
1904-05..	249,135,746	2,561,648	134,407,321	112,292,726	291,783,032	588,357,130	426,066,402	31.54
1905-06..	201,683,668	5,642,859	98,326,137	97,902,153	295,488,438	491,534,247	393,632,094	24.99
1906-07..	203,847,345	3,446,748	91,726,655	108,888,982	298,715,130	499,115,927	390,226,945	23.50
1907-08..	125,980,524	5,626,463	57,846,442	62,690,077	298,294,750	418,648,811	346,141,192	16.71
1908-09..	266,409,304	3,523,975	164,867,536	99,046,169	311,138,321	574,023,650	476,005,877	34.60
1909-10..	263,928,232	4,055,473	139,846,192	120,074,087	328,110,749	587,983,508	467,909,421	29.90
1910-11..	137,647,641	8,205,699	45,414,054	84,027,888	321,362,750	450,804,692	366,776,804	12.38
1911-12..	193,400,713	1,719,870	85,531,845	106,148,998	318,547,900	510,228,743	404,078,845	21.12
1912-13..	195,293,255	4,423,161	80,883,313	109,986,781	304,043,400	494,913,494	384,926,713	21.00
1913-14..	247,648,869	1,141,874	144,839,106	101,667,879	296,175,300	542,682,285	441,014,406	32.84
1914-15..	308,083,429	7,259,934	236,631,246	64,192,249	290,192,000	591,015,495	526,823,246	44.91
1915-16..	534,828,022	1,503,570	423,755,453	109,268,999	288,777,000	821,801,432	712,532,453	59.49
1916-17..	372,372,218	3,978,724	302,869,173	67,672,671	288,498,600	656,892,094	589,219,423	51.40
1917-18..	379,129,934	1,827,873	319,301,542	58,993,662	295,573,000	662,875,061	603,881,399	52.87
1918-19..	.....	.....	.....	.....	299,921,000	.....	.....	.....

The proportion of foreign fine wools increased somewhat last year, from 51.40 per cent in 1917 to 52.87 per cent in the present year, which with the exception of the year 1916 is the largest percentage and also the largest amount recorded. The total quantity of fine wools retained for consumption, both foreign and domestic, amounted to 603,881,399 pounds, an increase of 14,661,976 pounds over the preceding year.

The net imports of Class I and II wools amount to 319,301,542 pounds and exceed the imports of the preceding year by 16,432,369 pounds. The net imports of Class III wools were 58,993,662 pounds, and are the smallest imports of these wools recorded in the table, which goes back to 1891.

The following table shows the total and average annual supplies for five-year periods, beginning in 1888, the ten-year periods 1888-1897, 1893-1902, 1903-1912, and 1908-1917, and the supply for 1918.

WOOL SUPPLY, 1888-1918. — DOMESTIC PRODUCTION AND IMPORTS
LESS EXPORTS.

Fiscal years ending June 30.	All wools.	Fine wools.
	<i>Pounds.</i>	<i>Pounds.</i>
1888-1892. Five years, total.....	2,122,407,842	1,686,818,840
Annual average, five years.....	424,481,568	337,363,768
1893-1897. Five years, total.....	2,549,920,592	2,070,423,829
Annual average, five years.....	509,984,118	414,084,766
1888-1897. Ten years, total.....	4,672,328,434	3,757,242,669
Annual average, ten years.....	467,232,843	375,724,267
1898-1902. Five years, total.....	1,988,771,621	1,582,374,537
Annual average, five years.....	397,755,324	316,474,907
1893-1902. Ten years, total.....	4,538,692,213	3,652,798,366
Annual average, ten years.....	453,869,221	365,279,837
1903-1907. Five years, total.....	2,476,984,249	1,925,618,882
Annual average, five years.....	495,396,850	385,123,776
1898-1907. Ten years, total.....	4,465,755,870	3,507,993,419
Annual average, ten years.....	446,575,587	350,799,342
1908-1912. Five years, total.....	2,541,688,925	2,060,912,139
Annual average, five years.....	508,337,785	412,182,428
1903-1912. Ten years, total.....	5,018,673,174	3,986,531,021
Annual average, ten years.....	501,867,317	398,653,102
1913-1917. Five years, total.....	3,107,304,820	2,654,513,190
Annual average, five years.....	621,460,964	530,902,636
1908-1917. Ten years, total.....	5,648,993,747	4,715,425,329
Annual average, ten years.....	564,899,375	471,542,533
1918.....	662,875,061	603,881,399

MOHAIR.

As no new official statistics of the production of mohair in this country are available, no change has been made in our estimate of the mohair grown here, which is placed the same as in recent years at 6,000,000 pounds.

Texas, Oregon, New Mexico, California, and Arizona are the principal sources of supply of domestic mohair.

MOHAIR PRODUCTION IN THE UNITED STATES.

United States Census Reports and Commercial Estimates.

Year.	Fleeces.	Weight of Mohair.
		<i>Pounds.</i>
1900.....	454,932	961,328
1910.....	1,682,912	3,778,706
1912.....		4,000,000*
1913.....		4,500,000*
1914.....		4,500,000*
1915.....		6,000,000*
1916.....		6,000,000*
1917.....		6,000,000*
1918.....		6,000,000*

* Commercial estimate.

STOCK OF WOOL IN THE BOSTON MARKET.

Owing to the Government's taking possession of all the wool in the country, the Boston Wool Trade Association is unable to make its customary report of the stock of wool in the Boston market as of January 1. It is understood that the quantity of wool held by the Government is not less than 325,000,000 pounds. No details of classes or qualities of wool held by the United States can be ascertained.

A series of auction sales of government-held wool was inaugurated in Boston December 18, 19, and 20, at which a large quantity of wool was sold, although much was withdrawn because of failure to receive satisfactory offers. These sales will be continued from time to time and arrangements are in progress for similar auctions in Philadelphia, where the offerings will be confined mostly to carpet wools. It seems to be the purpose of the Government to dispose of its holdings of wool gradually by auctions rather than to demoralize the market by an immediate disposal of its stock accumulated in anticipation of military requirements.

SLAUGHTER AND MOVEMENT OF SHEEP.

The monthly receipt of sheep at the principal markets of the country as reported by the Department of Agriculture for the first ten months of the year 1918, together with the shipments from and the slaughter at the same points, is reported by months as follows :

	Receipts.	Shipments.	Slaughter.
January	1,301,763	527,477	754,358
February.....	994,023	432,585	570,996
March	1,081,013	494,943	582,827
April	888,017	364,390	527,361
May	950,773	402,321	562,056
June	1,406,977	693,262	697,914
July	1,615,910	753,788	980,998
August	2,232,539	1,284,545	903,495
September	3,311,460	2,052,285	1,209,803
October	3,267,509	2,085,973	1,203,652
Total 10 months.....	17,049,984	9,091,569	7,993,460

The above figures are the detailed statements as furnished by the Department, but they do not correspond exactly with the total ten months' statement from the same source, which follows, receipts 17,675,200, shipments 9,371,123, slaughter 8,171,443.

The slaughter of sheep at establishments where Federal meat inspection was maintained during the ten years 1908 to 1917 inclusive was as follows :

1908	9,702,545	1913	14,724,465
1909	10,802,903	1914	14,958,834
1910	11,149,937	1915	12,909,089
1911	13,005,502	1916	12,018,634
1912	14,208,724	1917	11,341,906

The total number of sheep killed yearly at four Western centers, Chicago, Kansas City, St. Louis, and Omaha, and total yearly receipts of sheep at Eastern seaboard markets, Boston, New York, Philadelphia, and Baltimore, are reported in the "Chicago Price Current Grain Reporter's Statistical Annual," as follows :

SEABOARD SHEEP RECEIPTS, AND SLAUGHTER AT PRINCIPAL WESTERN
POINTS, 1903-1917.

Calendar Year.	Western killings.	Seaboard receipts.	Total.
1903.....	5,827,000	3,314,000	9,141,000
1904.....	5,465,000	3,128,000	8,593,000
1905.....	5,879,000	2,425,000	8,304,000
1906.....	6,117,000	2,606,000	8,723,000
1907.....	5,701,000	2,956,431	8,657,431
1908.....	5,824,000	3,364,349	9,188,349
1909.....	6,578,000	3,346,147	9,924,147
1910.....	6,911,000	3,173,706	10,084,706
1911.....	8,295,000	3,244,000	11,539,000
1912.....	9,055,000	6,426,720	15,481,720
1913.....	8,592,000	3,690,177	12,282,177
1914.....	8,242,000	2,191,254	10,433,254
1915.....	7,000,000	829,873	7,829,873
1916.....	8,614,000	1,951,660	10,565,660
1917.....	5,620,000	1,834,122	7,454,122

The Western killings and the seaboard receipts were considerably smaller than in the preceding year, the recorded slaughter at these points being 7,454,122, a decrease of 3,111,538 from the previous year.

THE COURSE OF PRICES.

The following table shows the relative prices in Boston of a line of standard wools as reported for the years 1904 to 1918, inclusive, and indicates in compact form the effect of the conditions prevailing in each year of the series.

The Wool Fluctuations Price Chart, which also appears here, shows, through a comparison of the prices of American wools at home and foreign wools abroad, the general effect of our tariff changes, and the influence of war conditions both here and abroad. It will be noticed that in the last four years the foreign prices of tops and the domestic prices of scoured wools have reached so great an altitude that a modification of the chart has become imperative. No prices higher than 84 cents are shown by the lines, but a note is inserted showing the higher prices and the time when they occurred.

PUBLISHED BY THE NATIONAL ASSOCIATION OF WOOL MANUFACTURERS, BOSTON, MASS., U. S. A.

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BOSTON WOOL PRICES.

The Boston prices of domestic wools in October for the last fifteen years are shown in the table which follows :

COMPARATIVE PRICES OF DOMESTIC WOOL IN BOSTON, OCTOBER, 1904-1918.

	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918
OHIO, PENNSYLVANIA, AND WEST VIRGINIA.															
<i>(Washed.)</i>															
XX and above . . .	35	36½	34	34	33	36	30	28	31	26	30	32	40	77	80
Medium	36	41½	40	40	34	40	34	31	37	30	33	40	*	*	90
Fine Delaine	36	37½	36	38½	35	40	34	30	34	27	31	34	43	83	90
<i>(Unwashed.)</i>															
Fine	24	27	26	27	23	28	22	20	23	20	24	26	33	65	65
Medium	30	34½	33	33	26	36	28	25	30	23	27	36	*	75	75
Fine Delaine	27	30	28	31	28	33	26	24	28	22	26	30	37	75	75
MICHIGAN, WISCONSIN, NEW YORK, ETC.															
<i>(Washed.)</i>															
Fine	27½	31*	30*	30*	28*	31*	28*	*	*	*	*	*	*	*	65
Medium	33	40	39	39	33	38	33	30	36	29	32	38	*	*	75
Fine Delaine	34	36	34	37	34	38	32	28	33	26	29	32	*	*	75
<i>(Unwashed.)</i>															
Fine	22	25	24	25½	22	26	20	18	22	19	22	24	30	62	62
Medium	29	33	32	32	25	34	27	24	29	22	26	35	41	73	73
Fine Delaine	25	28	26	29	26	32	25	22	26	21	24	28	36	72	72
KENTUCKY AND INDIANA.															
<i>(Unwashed.)</i>															
Medium	30	35	33	31	25	35	28	25	31	24	27	39	44	78	78
MISSOURI, IOWA, AND ILLINOIS.															
<i>(Unwashed.)</i>															
Medium	29	34	32	30	24	32	26	23	28	22	25	35	40	73	73
TEXAS.															
<i>(Scoured Basis.)</i>															
Fine, 12 months . . .	62	75	70	71	55	75	60	52	62	52	58	68	83	1.75	1.75
Fall, fine	52	62	58	58	45	60	50	44	50	43	48	57	60	1.45	1.45
CALIFORNIA.															
<i>(Scoured Basis.)</i>															
Spring, Northern, free, 12 months . .	62	74	70	68	50	70	55	48	54	48	53	65	80	1.75	1.75
Fall, free	53	62	60	58	40	53	45	40	45	40	45	55	57	1.40	1.40
TERRITORY WOOL, INCLUDING MONTANA, WYOMING, UTAH, IDAHO, OREGON, ETC.															
<i>(Scoured Basis.)</i>															
Staple fine	65	76	71	73	60	78	65	60	67	54	60	72	90	1.80	1.80
" medium	60	70	66	68	52	70	57	52	60	47	53	65	80	1.50	1.50
Clothing, fine	60	72	68	65	53	70	58	50	60	48	55	68	80	1.70	1.70
" medium	55	68	63	60	45	65	50	45	56	43	50	60	78	1.40	1.40

* Nominal.

24 NATIONAL ASSOCIATION OF WOOL MANUFACTURERS.

BOSTON RECEIPTS AND SHIPMENTS OF WOOL.

The following table shows the receipts of domestic and foreign wools separately and also the total receipts, with the reported shipments of all wools for a period of twelve years, as compiled by the Boston Chamber of Commerce :

YEARLY RECEIPTS AND SHIPMENTS OF WOOL AT BOSTON FOR TWELVE YEARS 1907-1918, INCLUSIVE.

YEAR.	RECEIPTS.			SHIPMENTS REPORTED.
	Domestic.	Foreign.	Total.	All Wools.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
1907.....	185,879,807	96,212,199	282,092,006	236,246,461
1908.....	190,470,231	76,097,317	266,567,548	198,523,505
1909.....	247,463,739	149,487,123	396,950,862	263,810,867
1910.....	195,536,835	81,173,849	276,710,684	217,761,880
1911.....	230,391,364	67,759,223	298,150,587	217,239,723
1912.....	236,458,198	124,143,562	360,601,760	276,912,464
1913.....	161,800,680	63,336,325	225,136,325	183,710,214
1914.....	190,730,629	144,145,491	334,876,120	267,149,305
1915.....	181,700,678	247,914,385	429,615,063	272,473,422
1916.....	205,194,677	234,998,488	440,193,165	302,868,263
1917.....	210,124,902	296,461,275	506,586,177	279,850,815
1918.....	183,296,708	320,180,422	.....	200,558,487

The following tables show the annual receipts of domestic and foreign wool in Boston by months for the years 1915 to 1918, inclusive, and the shipments in pounds from Boston as reported by the several railroads and by sea for the year 1918 :

SHIPMENTS OF WOOL FROM BOSTON BY MONTHS (POUNDS).
(*Boston Chamber of Commerce, James A. McKibben, Secretary.*)

1918.

RAILROADS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for Year.
Boston & Albany R.R.:													
Boston & Albany Grand Junction	2,413,596	1,546,202	2,088,312	2,262,093	2,382,084	2,111,561	2,297,576	3,823,273	2,242,646	3,442,213	1,905,688	2,333,699	28,848,793
New York, New Haven & Hartford R.R.:	102,170							56,800					158,970
Boston & Maine R.R.:	7,055,400	3,564,100	4,714,700	3,501,210	3,685,000	5,020,700	6,170,000	4,321,300	5,217,700	5,135,197	6,698,895	3,185,600	58,269,802
Terminal:	10,063,703	8,694,947	14,486,819	10,399,101	6,668,484	8,316,705	6,434,112	11,755,616	11,775,706	4,057,058	3,334,957	693,160	96,670,368
Mystic Wharf:	2,901,158	2,707,767	1,691,945	354,975	384,947	67,240	502,087	161,355	320,844	2,606,961	1,487,650	58,240	13,245,169
By sea:	1,234,500	1,205,400	726,845	188,964	4,800	4,876							3,365,385
Total each month,	23,770,527	17,718,416	23,708,621	16,706,343	13,125,265	15,321,082	15,393,775	20,118,244	19,556,896	15,241,429	13,427,190	6,270,699	200,558,487
Total after January 1. . . .	23,770,527	41,488,943	65,197,564	81,903,907	95,029,172	110,550,254	125,944,029	146,062,273	165,619,169	180,860,598	194,287,788	200,558,487	
Total after January 1, preceded year	62,236,540	55,901,982	88,300,160	113,871,863	134,812,401	155,847,948	178,397,509	193,331,528	212,911,248	239,752,399	260,407,821	279,850,815	279,850,815

The above table does not cover all the shipments of wool from Boston during the year but, as the Chamber of Commerce explains, comprises only those of which the transportation companies render an account. It appears from the previous table that the receipts of wool, both foreign and domestic, during the year amounted to 503,477,130 pounds, a quantity 302,918,643 pounds greater than the table of shipments accounts for.

STATISTICS OF IMPORTS OF WOOL AND WOOLENS.

The table of imports of wool and manufactures of wool entered for consumption for the fiscal years ending June 30, 1917 and 1918 has not yet been published by the Bureau of Commerce, but will be printed in the Bulletin when received.

On page 28 is a table which gives the imports of wool into the principal ports of the country, that is Boston, New York, and Philadelphia, by classes for the series of twenty-three years commencing with 1896, and on page 29 is another table giving the wool imported and the principal countries where it originated. These tables present at a glance the salient facts of wool importations, and are valuable as indicating in some degree the manufacturing conditions, and also in a measure the effects of prospective and enacted tariff legislation from time to time. Thus the Dingley tariff, imposing a duty on wool, took effect July 24, 1897, and was immediately preceded by large importations under the Gorman-Wilson law by which wool was free from duty. The re-imposition of duty was followed by greatly reduced imports, and it was not until 1916, when the European war was making great demands on our mills, and the Simmons-Underwood bill had been in force for over two years, during the early part of which period there was much unemployment in American mills, that the volume of imports reached the 1897 figures. Nearly as much wool was imported in the five years under the present law as was imported during the eleven years 1898-1908, inclusive.

The recent intense activity is doubtless owing in a great measure to the war's demands, but the experience of the mills under the law of 1913, previous to the opening of the war in August, 1914, shows that the demand for wool would have been very small comparatively under conditions then existing.

During the life of the Dingley Act and of the Payne-Aldrich law, when a duty was imposed on wool and a corresponding duty on woolens, the annual importation of wool varied from 76 millions of pounds in 1899 to 243 millions in 1905, while the average was about 170 millions of pounds.

These tables, as stated in the footnotes, do not show the total importations. About 5 per cent more is usually imported through minor ports.

WOOL IMPORTED INTO BOSTON, NEW YORK, AND PHILADELPHIA.
BY PORTS AND CLASSES.

Mohair, Alpaca, and similar hairs are included with Class II. wools.

GROSS IMPORTS YEAR ENDING JUNE 30.	BOSTON.			NEW YORK.			PHILADELPHIA.			TOTAL.
	Class I.	Class II.	Class III.	Class I.	Class II.	Class III.	Class I.	Class II.	Class III.	
	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	
1896.....	78,398,112	9,539,881	30,325,673	28,939,693	543,352	52,764,614	8,301,279	2,070,608	15,055,110	225,938,322
1897.....	137,221,457	23,156,843	33,421,729	48,428,014	2,371,604	62,522,561	9,884,925	1,811,398	13,676,511	332,495,042
1898.....	36,205,712	2,672,113	22,823,137	5,865,916	458,732	50,071,999	2,306,013	17,505	9,661,885	70,083,012
1899.....	8,335,942	1,554,556	12,456,404	2,911,683	155,121	43,251,114	1,517,560	344,368	4,971,888	135,498,636
1900.....	30,192,843	5,343,455	29,333,226	3,561,996	1,275,008	61,922,600	3,281,782	3,266,758	14,486,204	152,663,872
1901.....	22,416,924	3,396,580	19,963,032	5,602,497	210,782	39,112,400	2,072,551	572,304	8,171,451	101,518,521
1902.....	51,479,822	2,820,800	21,778,976	7,308,817	920,301	52,417,988	5,468,922	266,807	19,780,677	162,243,110
1903.....	30,601,779	8,877,714	35,294,573	5,323,738	1,693,694	54,119,001	4,443,990	1,991,395	29,648,574	171,994,458
1904.....	37,821,884	8,980,496	37,984,308	3,070,482	1,389,643	48,582,335	4,509,591	362,262	27,039,439	170,401,040
1905.....	86,741,441	19,018,797	37,070,260	9,908,856	2,908,801	44,082,025	11,146,872	1,569,526	30,346,375	242,792,953
1906.....	64,801,760	8,336,094	22,420,950	8,555,810	1,657,970	49,278,261	10,227,347	1,772,888	26,788,974	193,840,054
1907.....	61,116,729	4,204,964	25,713,122	8,817,037	1,159,185	61,357,911	8,744,454	854,390	22,226,390	194,194,182
1908.....	34,002,148	7,247,799	13,023,020	3,397,855	522,524	36,778,123	6,220,038	459,275	16,647,519	118,298,301
1909.....	114,512,293	11,591,627	24,757,185	11,100,437	383,908	52,853,241	12,531,238	1,852,418	24,005,573	253,587,920
1910.....	79,232,943	17,022,966	27,476,785	14,399,419	1,574,625	66,098,923	13,081,388	4,635,818	26,762,386	250,285,253
1911.....	32,689,348	5,532,189	20,117,152	1,327,443	252,927	43,540,674	2,205,818	531,663	18,818,639	125,015,853
1912.....	54,443,667	5,840,571	25,538,651	4,189,259	473,126	56,040,867	6,878,019	1,162,021	22,660,591	177,226,772
1913.....	50,887,889	8,468,552	27,131,377	3,652,043	692,695	55,702,561	6,483,156	2,575,977	24,667,461	180,261,721
1914.....	100,371,290	8,630,104	23,809,154	11,409,227	2,863,728	53,845,615	9,364,414	1,094,239	23,199,709	236,080,682
1915.....	161,405,006	8,934,849	7,926,024	26,414,800	1,849,884	52,391,984	8,822,355	1,097,321	4,715,701	273,557,924
1916.....	230,947,637	10,152,641	12,916,602	76,740,485	6,389,584	86,270,319	15,141,718	702,755	9,223,693	448,494,434
1917.....	207,692,666	8,335,661	1,743,571	53,586,228	7,874,856	59,316,623	5,019,801	105,817	6,433,244	350,108,467
1918.....	247,214,072	2,549,498	3,785,855	38,460,632	4,165,675	48,808,361	3,790,910	21,343	6,107,587	354,903,933

NOTE.—These figures represent about 95 per cent of the total quantity of wool imported into all the ports of the United States. In 1918 the total imports at all ports were, Class I., 303,863,940; Class II., 13,953,957; Mohair, etc., 2,312,375; Class III., 58,994,662; Total, 379,129,934 pounds.

WOOL IMPORTED INTO BOSTON, NEW YORK, AND PHILADELPHIA.
BY PRINCIPAL COUNTRIES OF PRODUCTION.

YEAR ENDING JUNE 30.	Russia.	Turkey.	United Kingdom.	Argentina.	Uruguay.	Chinese Empire.	British E. Indies.	British Oceania.	All other Countries.	TOTAL.
	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.
1896.....	13,150,509	17,987,753	14,229,068	32,291,341	9,048,350	26,084,232	9,897,531	72,995,090	30,264,448	225,938,322
1897.....	19,706,449	20,239,717	27,759,419	64,969,556	15,004,237	21,461,478	10,989,980	109,912,851	42,451,335	332,495,042
1898.....	16,999,224	9,282,762	12,434,332	16,734,279	1,309,974	20,369,294	6,445,063	31,877,252	14,630,833	130,083,012
1899.....	13,373,350	5,697,377	9,156,624	7,937,657	149,573	14,276,124	6,949,491	7,249,740	10,688,700	75,498,636
1900.....	18,869,252	9,577,147	20,393,063	20,064,279	1,072,307	30,998,289	9,397,020	23,121,394	19,171,121	152,663,872
1901.....	13,720,814	8,355,941	16,919,793	14,358,218	783,075	9,181,105	4,146,698	22,570,030	11,482,847	101,518,521
1902.....	16,322,231	12,215,316	21,737,509	45,287,370	533,634	18,843,396	6,813,401	26,559,531	13,930,722	162,243,110
1903.....	19,455,392	15,440,933	31,778,842	23,265,309	541,384	26,032,976	11,850,446	25,238,498	18,390,678	171,994,458
1904.....	23,403,797	17,742,473	26,807,042	28,168,060	112,208	24,912,491	10,088,556	25,792,098	13,374,315	170,401,010
1905.....	23,790,451	23,454,937	25,213,450	47,695,567	7,740,309	30,023,157	12,202,135	56,212,733	16,460,214	242,792,953
1906.....	21,180,755	16,032,199	21,615,963	42,167,927	5,807,190	30,233,762	6,011,319	39,548,551	11,242,388	193,840,054
1907.....	21,231,378	15,710,735	14,863,620	23,195,208	5,856,611	39,762,115	8,697,581	52,538,582	12,338,352	194,194,182
1908.....	12,913,964	10,686,993	15,747,766	16,221,285	1,604,221	21,717,431	4,936,421	27,032,576	7,438,644	118,298,301
1909.....	7,966,392	10,050,199	31,125,711	58,379,834	5,868,232	35,634,909	12,952,758	79,420,778	12,189,107	253,587,920
1910.....	13,263,175	13,521,623	37,097,134	31,082,184	8,789,785	46,599,637	16,603,135	68,199,625	15,128,955	250,285,253
1911.....	12,944,356	9,552,982	12,854,102	17,891,376	711,525	30,055,965	10,831,635	20,494,162	9,679,750	125,015,853
1912.....	20,253,067	13,682,915	13,656,409	27,621,628	3,216,988	32,636,950	15,725,299	38,494,677	11,938,839	177,226,772
1913.....	24,695,118	15,457,035	19,330,440	26,742,584	3,718,873	35,572,181	10,212,091	31,852,863	12,680,536	180,261,721
1914.....	22,845,353	10,357,809	22,023,698	42,276,542	13,017,718	31,077,858	14,149,719	64,697,584	14,141,199	236,080,682
1915.....	2,290,408	4,729,540	16,446,558	77,808,041	16,597,623	36,717,754	2,120,343	75,865,711	40,981,966	273,557,924
1916.....	3,309,879	331,191	23,326,562	129,163,383	9,508,756	47,435,467	11,506,144	121,361,539	*101,579,848	448,494,434
1917.....	.....	9,889	2,314,578	207,970,092	37,601,961	30,471,413	449,848	1,772,257	*102,551,513	350,108,467
1918.....	3,124,493	.....	138,605	181,154,575	18,409,011	26,879,744	53,557	32,366,894	*92,777,054	354,903,933

*78,430,380 pounds of wool included in "All other Countries" came from British South Africa in 1916, 31,970,422 pounds in 1917, and 61,027,252 pounds in 1918.
NOTE.—These figures represent about 95 per cent of the total quantity of wool imported into all ports of the United States. (See preceding page.)

IMPORTS OF WOOL BY PORTS AND CLASSES.

These tables show the gross imports of wool brought into the three principal wool importing centers both by classes and ports, but as stated in the footnotes to the tables there is a considerable quantity imported each year into minor ports. The tables show a small increase in the quantity of wool imported, as compared with the preceding year. Boston retains her supremacy in the importation of Class I wools, receiving a total of 247,214,072 pounds, against 38,460,632 pounds at New York and 3,790,910 pounds at Philadelphia. The imports of Class II wools amounted to 16,266,332 pounds, of which 2,312,375 pounds were mohair, alpaca, etc. This is but 50,000,000 pounds less than the imports of these wools in 1917. The imports of Class III wools into New York amounted to 48,808,361 pounds, a total nearly forty millions of pounds in excess of the receipts of similar wools in Boston and Philadelphia. The total importation of Class III wools in the three ports amounted to 58,701,803 pounds, and of all wools, including mohair, etc., to 354,903,933 pounds. The total importations of wool of all classes, including mohair, during the fiscal year ending June 30, 1918, amounted to 379,129,934 pounds. This is the greatest quantity ever imported into the United States in any one year, except in 1916, when 534,828,022 pounds were imported.

WOOL IMPORTED INTO BOSTON, ETC., BY PORTS AND CLASSES.

BOSTON:

Class I	247,214,072
" II	2,549,498
" III	3,785,855

NEW YORK:

Class I	38,460,632
" II	4,165,675
" III	48,808,361

PHILADELPHIA:

Class I	3,790,910
" II	21,343
" III	6,107,587

Total	354,903,933
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Note: These figures represent about 95 per cent of the total quantity of wool imported into all ports of the United States.

In 1918, the imports at all ports were :

Class I	303,868,940
“ II	13,953,957
Mohair	2,312,375
Class III	58,994,662
Total	379,129,934

In the upper table the imports of Mohair are included with Class II wools.

WOOL IMPORTED INTO BOSTON, ETC., BY PRINCIPAL COUNTRIES OF
PRODUCTION — 1918.

Russia	3,124,493
Turkey .....	.....
United Kingdom	138,605
Argentina	181,154,575
Uruguay	18,409,011
Chinese Empire	26,879,744
British E. Indies	53,557
British Oceania	32,366,894
All other countries	92,777,054
Total	354,903,933

These figures represent about 95 per cent of the total quantity imported into all ports of the United States.

In 1918 the imports from all other countries include the following :

61,027,252 pounds came from British South Africa.	
17,461,439 “ “ Chile.	
1,672,363 “ “ Ecuador.	
9,394,883 “ “ Peru.	
1,560,051 “ “ Spain.	

COUNTRIES OF PRODUCTION AND IMMEDIATE SHIPMENT.

The countries of production and immediate shipment of wools imported into the United States during the fiscal year ending June 30, 1918, and the quantity of wool from each are as follows. This statement has been compiled with much care from the "Monthly Summaries" of the Department of Commerce.

WOOL IMPORTED INTO BOSTON, NEW YORK, AND PHILADELPHIA, FISCAL YEAR ENDING JUNE 30, 1918, BY COUNTRIES OF PRODUCTION, IMMEDIATE SHIPMENT, AND CLASSES.

Compiled from Reports of United States Bureau of Foreign and Domestic Commerce.

COUNTRIES OF PRODUCTION.	Countries of Immediate Shipment.	Class I.	Class II.	Mohair, Alpaca, etc.	Class III.	TOTAL.
		Pounds.	Pounds.	Pounds.	Pounds.	Pounds.
EUROPE:						
Iceland and Faroe Islands	Iceland and Faroe Islands	209,287	34,229	729,990		973,506
Portugal	Portugal			34,376		174,651
Russia in Europe,	Russia in Europe	140,275				
China	China			96,790		225,798
Spain	Spain	855,676	29,923	129,008		
United Kingdom:	United Kingdom:			620,299		
England	England			54,153		1,560,051
Scotland	Scotland					
		35		203	38,447	38,685
					99,920	99,920
Total		1,205,273	64,152	203	1,802,983	3,072,611
ASIA:						
British India . .	British India . .	12,248				53,557
China	China			41,309		
Japan	Japan	2,677,738	149,850	24,029,667		26,879,744
Russia in Asia . .	Russia in Asia . .		7,987	7,144		15,131
	China	37,908		2,602,589		2,898,695
				258,198		
Total		2,727,894	157,837	22,489	26,938,907	29,847,127
AFRICA:						
British S. Africa,	British S. Africa .	55,745,777		758,503	4,521,876	61,027,252
British W. Africa,	British W. Africa,			1,096		
					31,818	31,818
Total		55,745,777		759,599	4,553,694	61,059,070
NORTH AMERICA:						
Canada	Canada	164,411	5,335			169,746
Mexico	Mexico				79,062	79,062
Total		164,411	5,335		79,062	248,808

WOOL IMPORTED INTO BOSTON, ETC. — *Continued.*

COUNTRIES OF PRODUCTION.	Countries of Immediate Shipment.	Class I.	Class II.	Mohair, Alpaca, etc.	Class III.	TOTAL.
		<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
CENTRAL AMERICA:						
Guatemala	Guatemala	200			113,118	113,318
Honduras	Honduras				217	217
Panama	Panama	2,050		445	40,259	42,754
Nicaragua	Nicaragua				2,400	2,400
Total		2,250		445	155,994	158,689
SOUTH AMERICA:						
Argentina	{ Argentina	161,089,148	3,838,542		15,269,279	{ 181,154,575
Brazil	{ Uruguay	957,606				{ 8,202
Bolivia	{ Brazil	55			8,147	{ 9,554
Bolivia	{ Bolivia	6,857				{ 9,554
Chile	{ Peru	2,697				{ 17,461,439
Colombia	{ Chile	12,069,231	156,373	3,855	5,231,980	{ 4,331
Ecuador	{ Colombia	3,022			1,309	{ 1,672,363
Peru	{ Ecuador	997,549			674,814	{ 9,394,883
Uruguay	{ Peru	4,638,134	329,743	1,307,560	3,119,446	{ 18,409,011
Venezuela	{ Uruguay	17,488,372	90,383		830,256	{ 10,983
	{ Venezuela	200			10,783	{ 228,125,341
Total		197,252,871	4,415,041	1,311,415	25,146,014	228,125,341
AUSTRALASIA:						
Australia and Tasmania . .	{ Australia	28,085,666			161	{ 28,249,748
New Zealand . .	{ England	161,463				{ 4,117,146
	{ Canada	2,458				{ 32,366,733
	{ New Zealand . .	4,117,146				{ 161
Total		32,366,733			161	32,366,894
SUNDRY ISLANDS:						
Dutch W. Indies, Jamaica	Dutch West Indies, Jamaica	405			24,963	25,368
					25	25
Total		405			24,988	25,393
Grand Totals,		289,465,614	4,842,365	2,094,151	58,701,803	354,903,933

34 NATIONAL ASSOCIATION OF WOOL MANUFACTURERS.

WOOL IMPORTED INTO BOSTON, ETC. — *Concluded.*

RECAPITULATION IMPORTS BY GRAND DIVISIONS, YEAR 1918.

PLACES OF PRODUCTION.	Class I.	Class II.	Mohair, Alpaca, etc.	Class III.	Total.
Europe	1,205,273	64,152	203	1,802,983	3,072,611
Asia	2,727,894	157,837	22,489	26,938,907	29,847,127
Africa	55,745,777	759,599	4,553,694	61,059,070	61,059,070
North America	164,411	5,335	79,062	243,808	243,808
Central America	2,250	445	155,994	158,689	158,689
South America	197,252,871	4,415,041	1,311,415	25,146,014	228,125,341
Australasia	32,366,733	161	32,366,894	161	32,366,894
Islands	405	24,988	25,393	25,393	25,393
Totals	289,465,614	4,642,365	2,094,151	58,701,803	354,903,933
In addition to the imports thus specified there were imported into other ports, the countries of production and shipment not being named	14,403,326	9,311,592	218,224	292,359	24,226,001
Thus the total imports for the fiscal year ending June 30, 1918, were	303,868,940	13,953,957	2,312,375	58,994,662	379,129,934

IMPORTS OF CLASS I WOOLS.

The imports of Class I wools into the three ports were 289,465,614 pounds, or 23,166,919 more than those of last year, which were 266,298,695 pounds. The following tabular statement covers the last five years and shows the amount coming into this country from each of the principal countries of production.

	1918.	1917.	1916.	1915.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
Australasia	32,366,733	1,772,257	120,767,019	75,826,825
Argentina	161,089,148	185,446,149	111,253,529	67,076,516
Uruguay	17,488,372	34,710,261	8,858,492	16,561,154
British South Africa .	55,745,777	23,552,260	63,966,713	26,452,132
All other	22,775,584	20,817,768	18,042,087	10,725,534
	289,465,614	266,298,695	322,829,840	196,642,161

Only 138,605 pounds of wool of all classes, the product of the United Kingdom, have been received here, the war's demands requiring their use at home.

IMPORTS OF CLASS II WOOLS.

Into the three principal ports were imported in the fiscal year 1918, 4,642,365 pounds of Class II wools, not including mohair, alpaca, etc., nearly all of which came from South America, much the greater part from Argentina, as appears in the following statement :

IMPORTS OF CLASS II WOOLS, FISCAL YEAR 1918.

	<i>Pounds.</i>		<i>Pounds.</i>
Iceland	34,229	Argentina	3,838,542
Spain	29,923	Chile	156,373
China	149,850	Peru	329,743
Japan	7,987	Uruguay	90,383
Canada	5,335		
		Total	4,642,365

Imports of Mohair, Alpaca, etc.

Our importations of mohair and similar hairs have been very much reduced because of the war, while at the same time our usual sources of supply have been reduced.

South America has furnished 1,311,415 pounds and South Africa 759,599 pounds out of 2,094,151 pounds, of which the country of origin is given. The supply from the Turkish possessions has of course been entirely cut-off.

Unlike other wools, which under the present tariff law are free of duty, mohair and similar hairs are subject to a duty of 15 per cent.

IMPORTS OF CLASS III WOOLS.

Class III wool comes from nearly every portion of the globe, but principally from the countries named in the subjoined statement, which covers the imports of the last three years. These wools are mostly used for the manufacture of carpets and low grade blankets. The imports of these wools are somewhat more than half those of 1916 and about nine millions of pounds less than in 1917. There has been a great change in the countries where they originated. The imports from Germany, France, and Turkey have ceased entirely. China, in the two last years, has sent but a few millions more than she did in 1916 alone. Imports from Argentina remain about as last year. Other countries have remained about stationary, or fallen behind.

	1918.	1917.	1916.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
Chinese Empire	24,029,667	25,404,645	45,528,723
Russia (Europe and Asia)...	3,086,585	.....	3,300,843
United Kingdom.....	138,367	2,379,905	16,989,170
Turkey (Europe and Asia) ..	.....	9,889	110,098
British East Indies	41,309	431,153	10,727,757
France .....	.....	110,829	227,153
Germany .....	.....	7,000	.....
Spain	674,452	5,759,943	1,986,053
Iceland.....	729,990	202,974	90,000
British South Africa.....	4,521,876	2,985,699	7,559,665
Argentina.....	15,269,279	14,754,584	14,670,272
Uruguay.....	830,256	2,891,700	405,164
Peru	3,119,446	4,176,819	1,206,944
Chile	5,231,980	3,306,902	3,848,632
Ecuador.....	674,814	748,649	75,226
All other	353,782	4,322,747	1,684,914
	58,701,803	67,493,438	108,410,614

The following table gives the total gross imports into the United States for a series of fiscal years. The quantity imported into other than the principal ports can be ascertained by comparison with other tables.

GROSS IMPORTS OF WOOL, FISCAL YEARS 1904-1918—POUNDS.

	Class I.	Class II.*	Class III.	Total.
1904.	45,575,993	12,934,143	115,232,698	173,742,834
1905.	109,888,258	26,551,624	112,695,864	249,135,746
1906.	86,810,307	15,204,254	99,674,107	201,688,668
1907.	82,982,116	10,671,378	110,194,051	203,847,545
1908.	45,798,313	13,332,540	66,849,681	125,980,524
1909.	142,580,993	21,952,259	101,876,052	266,409,304
1910.	111,604,330	31,614,235	120,721,019	263,939,584
1911.	40,104,845	12,456,468	85,086,328	137,647,641
1912.	71,203,329	15,557,664	106,639,720	193,400,713
1913.	67,238,715	16,886,446	111,168,094	195,293,255
1914.	125,088,761	20,556,795	102,003,313	247,648,869
1915.	222,017,420	20,356,212	65,709,752	308,083,429
1916.	403,121,585	22,437,438	109,268,999	534,828,022
1917.	279,481,501	25,218,046	67,672,671	372,372,218
1918.	303,868,940	16,266,332	58,994,662	379,129,934

* Includes mohair, etc.

IMPORTS OF WOOL MANUFACTURES.

The gross imports of manufactures of wool show a total foreign value of \$27,476,798, or about one-half more than the value of the corresponding imports of the previous year, and about two millions more than the imports of 1915.

As these are the foreign values they cannot properly be used for comparison with the value of home manufactures, except by the addition of the customs duties paid. The table of Imports Entered for Consumption in which the duties collected are stated has not yet been issued by the Bureau of Foreign Commerce.

IMPORTS OF WOOL MANUFACTURES, 1913-1918. (FOREIGN VALUE.)

	1913.		1914.		1915.		1916.		1917.		1918.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
GROSS IMPORTS, YEARS ENDING JUNE 30.												
Carpets and rugs, woven whole (sq. yds.)	1,085,431	\$4,895,989	1,073,877	\$4,452,309	1,059,172	\$2,947,057	733,458	\$2,371,351	659,807	\$3,024,610	473,604	\$2,247,128
All other (sq. yds.)									297,101	767,232	166,687	614,304
Clothing, etc., except shawls and knit goods		2,158,384		2,268,125		1,800,391		1,127,536		1,708,794		8,832,296
Cloth, pounds	4,285,495	4,888,447	12,385,586	12,794,048	10,648,900	10,262,732	6,117,908	6,479,063	6,055,032	7,494,082	2,650,882	4,619,498
“ square yards					17,129,292		8,880,828	8,212,495	8,212,495		3,864,145	
Dress goods, pounds			14,521,451	4,396,660	8,000,010	7,320,867	1,691,259	1,805,880	3,329,435	1,183,472	572,305	987,825
“ “ square yards	15,712,155	3,321,626	29,442,047	2,376,549	29,542,723		6,914,313		826,122		2,378,719	
Manufactures of mohair, etc.				1,448,898		2,243,660		1,673,029		1,885,216		944,704
Tops							483,183	251,812	5,853	5,913		101,422
Yarns							110,477	88,086	38,374	55,406	489,007	1,165,895
Wool wastes			36,530,487	3978,709		834,864		1,207,517		1,668,333		1,302,843
All other		1,053,695		5,578,906		4,381,785		653,263		1,069,405		6,680,883
Total		16,318,141		34,294,204		29,791,356		15,657,537		18,862,463		27,476,798

¹ January to June, 1914, inclusive.² July to December, 1913, inclusive.³ Since November 30, 1913.

IMPORTS OF WOOL AND MANUFACTURES OF WOOL ENTERED
FOR CONSUMPTION.

The imports of wool and manufactures of wool entered for consumption for this and the preceding fiscal year for which the full tables are not yet available compare as follows :

IMPORTS OF WOOL ENTERED FOR CONSUMPTION.

	Fiscal Years Ending June 30 —			
	1918.		1917.	
	Pounds.	Value.	Pounds.	Value.
Class I	303,941,562	\$164,899,497	279,480,038	\$101,503,109
Class II, including mohair, alpaca, etc.	15,498,087	9,540,472	26,423,754	10,225,545
Class III	59,155,166	24,027,554	67,674,728	19,822,372
Total	378,594,815	\$198,467,523	373,578,520	\$131,551,026

The imports for consumption of the principal wool manufactures compare as follows :

IMPORTS OF THE PRINCIPAL MANUFACTURES OF WOOL ENTERED FOR CONSUMPTION.

	1918.		1917.	
	Quantity.	Value.	Quantity.	Value.
Cloths:				
Worsted:				
Pounds	447,733 }	\$1,040,974	1,056,556 }	\$1,845,658
Sq. yds.	745,360 }		1,756,122 }	
Woolen:				
Pounds	2,208,023 }	3,489,513	5,247,978 }	5,922,160
Sq. yds.	3,108,406 }		6,803,765 }	
All other, Mohair, etc. (pounds) . . .	403,335	663,383	961,432	1,276,574
Total Cloths (pounds)	3,059,091	\$5,196,870	7,265,966	\$9,044,692
Dress Goods:				
Pounds	570,161 }	\$970,096	877,325 }	\$1,200,047
Sq. yds.	2,414,381 }		3,570,464 }	
Carpets (sq. yds.)	561,944	\$2,757,564	981,459	\$3,731,094
Yarns:				
Wool (pounds)	688,984	\$1,165,589	41,907	\$57,985
Mohair, etc. (pounds)	85,599	172,078	494,841	461,386
Total Yarns	774,583	\$1,337,667	536,748	\$519,371
Tops:				
Wool (pounds)	69,161	\$98,108	21,007	\$17,184
Mohair, etc. (pounds)	12,363	9,901	95,833	58,013
Total Tops	81,524	\$108,009	116,840	\$75,197
Wearing Apparel		\$8,878,790		\$1,773,633
All other		\$3,455,596		\$2,948,278
Total		\$23,112,560		\$19,292,302

The foreign value of wool manufactures imported is about three millions of dollars greater than in the fiscal year 1917, and is due more to the increased value of fabrics than to an increase in quantity of goods imported.

The imports of wool manufactures entered for consumption for the seven latest years compare as follows:

Fiscal Years.	Foreign Value.	Duty Collected.	Duty Paid Value.
1918.....	\$23,112,560	\$8,829,508	\$31,942,068
1917.....	19,292,302	6,590,475	25,882,777
1916.....	17,151,396	5,776,935	22,928,331
1915.....	29,879,621	9,701,772	39,581,393
1914.....	33,519,799	14,387,242	47,907,041
1913.....	15,031,317	12,293,904	27,325,221
1912.....	15,182,694	12,599,246	27,781,940

THE ENGLISH MARKET.

The Government's hold upon wool has continued through the year with ever increasing stringency, and allotments of wool to manufacturers have been subordinated to the military requirements of the nation. The United Kingdom has had to supply the needs of her own army and navy for clothing and the immense variety of other equipment involving the use of wool. The allied forces have also depended upon her to a very great extent, for the woolen mills of France were located generally in the northeastern section and these with the mills in Belgium, very early in the war, fell into the hands of the Central Powers, who carried away for their own use the stocks of raw material, and such of the machinery as they did not destroy, thus rendering these mills useless in case the fortunes of war should restore them to their rightful owners.

It is reported, doubtless with truth, that not less than 200,000 uniforms were supplied during the year to the American armies in France—the reasons for this being the difficulty of getting wool supplies in America for manufacture into the needed cloth, the risk and delay of ocean transportation, and the urgency for expedition in the supply of these uniforms. In addition, in order to provide for clothing the public and for the needs of returning soldiers, standard cloths of good appearance and excellent wearing qualities were devised and have been produced in great quantities both for men and for women.

All of this work has been carried on most successfully in spite of the fact that the English mills were drained to almost the last man who could be spared. These considerations, with the shortage of wool and the lack of man-power, made it imperative on the wool committees to reduce the allotments for civilian use to the lowest possible limit.

In order to present a first-hand view of conditions in England we quote freely from the market reports of Messrs. Ronald & Rodger of Liverpool, and from our valued contemporaries the "Wool Chart," and the "Wool Record" of Bradford.

The sentence first quoted from Messrs. Ronald & Rodger shows clearly the depressed, almost hopeless, state of mind of the wool industry in Great Britain at the opening of the year—a condition which later developments did not greatly relieve. With true British tenacity, which never says "die," dealers and manufacturers met the inevitable and have pulled through a year of unexampled difficulties without serious disaster, and are looking forward to the day

when Government restrictions, now gradually relaxing, shall be entirely removed and business be restored to its usual channels.

There has been much unrest, as was natural, because of the unusual conditions under which business had to be conducted, while at the same time the trade generally recognized the necessities of the case and conformed with all the grace possible to the conditions imposed.

The managing committees of the wool trade are greatly to be commended for the wisdom they have exercised, and the energy, and at the same time the conservatism they have displayed in handling the various critical questions that have arisen during the year. Naturally, their actions have at times excited criticism, but, on the whole, their efforts to deal justly in very difficult situations have met the approval of the trade. It is strongly hoped that by the middle of the coming year the usual London Wool Auctions will be resumed, by which time it is anticipated that wool supplies will be adequate for the requirements of the trade.

Extracts from the reports of Messrs. Ronald & Rodger follow:

January 1, 1918:

A record of budding hopes, only to be quickly followed by chilly disappointments, has robbed the year 1917 of any harvest of real satisfaction, and courage is necessary to look forward to the early future for any relief to the world from the horrors of war, and from the strain and sufferings entailed thereby to all besides the forces actively engaged in waging it.

The tight control of the War Trade Department in dealings in practically every raw and manufactured article has been even increased in the case of textile materials. The scanty allocation of supplies to manufacturers in the next three months brings in a serious complication for users of wool in the interference with labor, always a fertile source of difficulties.

Domestic wools have found such ample demand that stocks have been moved off with good results to the Government Departments, and growers are agitating for higher prices for the coming clip.

Colonial wools afford no special features except that a distribution in London at fixed prices has been arranged for January 10th, to include about 9,000 bales.

River Plate wools have been absent from this market but interest has been developed in a proposal to allow latitude for importations intended for special purposes, even if prices do not come within the scope of the present schedule for Colonial and similar descriptions, though present high quotations of cost in the River Plate are a heavy handicap against profitable operations.

February 1, 1918:

Business in all departments has to yield to the pressing wants of the fighting forces, and the restriction of food supplies is much felt, as well as the reduced quantities of raw materials, which threaten a shortage of occupation and wages for the masses.

The Board of Control is actively engaged in apportioning stocks of wool, seeking economy in consumption by the fixing of standard makes of cloth and other fabrics, as well for civilian use at home as for the absolutely needful up-keep of the valuable outlets in the export trades.

Future supplies are a matter for anxiety mostly on the score of scarcity of tonnage, and manufacturers of all textile materials are bravely if not cheerfully making the best of a bad time for them.

The distribution of Colonial wool in London on the 10th ultimo failed in its effort, the qualities catalogued, by some mischance, being mostly out of relation to what was wanted by holders of licenses to buy, and only about one-fourth of the quantity changed hands.

March 1, 1918:

The recrudescence of difficulties in Russia tends to dim the horizon of hope as regards decisive movements in military affairs, and the volume of ordinary business suffers in all directions. Food restrictions are beginning to tell their tale in forcible fashion, while there are signs everywhere of determination to insist upon no settlement of peace except on the principles of justice announced at the opening of the war.

The question of tonnage overtops others in the matter of food and raw materials, and whatever controversy may remain as to the necessity of hoarding supplies of wool for the distant future, the careful distribution of stocks at present is an acknowledged necessity. There has been a little less pressure for delivery of some kinds of army goods, and laudable efforts by the Authorities are made to deal out something, however little, to keep machinery going for civilian purposes.

April 3, 1918:

Naturally business remains in a very parlous condition, the necessary control by Government of all branches, in food-stuffs first, as well as other raw materials, affecting financial, commercial, and industrial operations alike.

The opportunist efforts of the War Trade Department, to retain supplies and yet allow users enough to keep labor and machinery going, give rise to somewhat contradictory results. For the moment, at least, consumption has been checked, and the Government prices for tops have been raised; while in the restricted field for civilian purposes extreme figures can be obtained for any suitable wools, even of quite inferior character.

Negotiations with the British growers have resulted in an enhanced scale of values for the new Domestic clip, making it 60 per cent instead of 50 per cent over pre-war level.

Colonial wools afford no new factor in the situation beyond the strain due to the stoppage of shipments in favor of food-stuffs, and consequent tightening of control of allocation to consumers.

June 1, 1918:

It becomes more and more patent that the adoption of a general policy to govern the control of the wool business and industry requires the solution of a wide range of problems. As regards supply the situation is more promising in *posse* than in *esse*, but the distribution imposes forethought towards securing the covering of Government contracts first, and restraining without strangling what remains of civilian manufactures. The increasing demands of the forces make severe calls on the man-power available, and the re-arrangement of working hours at the mills, inherently clashing with the interests of the wage earners, affords matter for delicate adjustment, which it can only be hoped may be accomplished by the suggested Industrial Councils. Thus little wonder is aroused at halting movements in all quarters, and it is really satisfactory that the volume of trade has been kept up so far so well.

Domestic Wools.—In view of the diminishing number of sheep in the British Isles it is encouraging to learn that the lambing season has been favorable, and that shearing prospects are good. The Government's schedule of prices for the new clip indicates an advance of 1d. to 2d. per pound on last year's figures.

Colonial Wools.—At the Distribution in London on the 9th ultimo 12,000 bales were catalogued. Buying licenses were freely applied for, but owing mainly to the faulty character of much of the offerings, barely 3,000 bales could be disposed of.

July 1, 1918:

The impenetrable mist hanging over matters military and political alike effectually checks developments in commercial or industrial energy. In the meantime, even if difficulties of food supply appear to be less oppressive for the moment, the scarcity of tonnage preventing any accumulation of stocks of textile raw materials tends to keep quotations for these on a high level. Manufacturers are struggling with labor problems—shortage of hands, alterations in working hours, and consequent disputes as to wages—which threaten to become even more acute in the early future.

Domestic wools of the new clip are coming on and satisfaction is generally felt by growers as to the quantity and condition of this year's produce.

Arrivals of Colonial wool have shown some little falling off lately, and specially good qualities are dealt out sparingly by the Department controllers. It is announced that the British Government have come to an arrangement to take over the clips of Aus-

tralia and New Zealand on old terms up till a year after the end of hostilities, and values are thereby stabilized, but whether the greatest economic advantage can always be obtained from the wide range of qualities is a subject of speculative opinion.

August 31, 1918:

Difficulties are more easily faced, if not overcome, as regards provision of shipping for military and civil requirements, and efforts to ration supplies of food and other materials are being resolutely sustained in all quarters, the matter of curtailment of the use of coal for the moment being extremely complicated as touching industrial activity as well as the comforts of common life.

Domestic wools of the new clip are helping to cope with the active demand for raw material, mainly for Army goods, and there is little machinery available for the production of anything else.

Colonial wools are being dealt out in similar fashion, and licenses to undertake orders for yarns or goods for export are difficult to obtain.

River Plate wool has been completely out of this market, and it remains to be seen whether in any scheme for the better sharing of the produce of the Colonies and the Plate between the Allies in the coming season there may be room for resuming imports here, while scarcity of tonnage must retard operations.

October 3, 1918:

The very substantial development of success on the side of the Allies in so many fields of warfare has been signalised by a certain revival of movement in financial matters, but operations in mercantile and industrial directions are still too much fettered by severe Government control to respond even to such encouragement.

In the wool trade generally there has indeed been no salient feature, but the disposal of available supplies of all qualities of Domestic and Colonial growth proceeds on a scale which keeps available labor and machinery quite busy with orders for war purposes, and yet leaves some, if only little, opportunity for coping with civilian requirements.

The arrangements so far arrived at seem to indicate slender chances of importations here from the River Plate.

November 2, 1918:

Laudable efforts are being made to frame schemes for the reconstruction of international relations hereafter, but their effect on business so far is purely academical.

The shortage of raw materials due to scarcity of tonnage is a matter for grave concern, and with respect to wool, the impossibility of getting the quantity from Australasia which has been counted upon in the next few months, has upset the calculations of the War Office as well as of hungry consumers. Nearly one hundred per cent of the machinery and labor available in the heavy woolen districts is occupied on urgent Government contracts, and the plight of makers of civilian goods is sad indeed.

Under strict War Office control there is nothing to record as regards Domestic or Colonial wools, and little prospect of any imports from the River Plate.

December 2, 1918:

The breathing space afforded by the armistice [signed November 11], after more than four years of war, provides scope for a vast field of ingenuity in devising means to change the use of raw material and machinery from the hitherto engrossing military to the prospective civil requirements. So far no distinct lead has been given by the Government authorities with respect to our article, beyond the setting up of a Wool Council to advise them as to post-war problems, and, meantime, business has practically come to a standstill.

Contracts for naval and military equipments are being cancelled or curtailed, but any distinct surplus of supplies of raw material can hardly tell effectually for a few months hence, and manufacturers are mainly interested in the chances of allocations for the production of civilian goods already freely sought for to answer demands for export.

Colonial Wools.—Negotiations have been completed whereby the British Government have secured the Australian and New Zealand Wool clips of 1919/20 as well as that of 1918/19, which portends a long continuance of control of prices and distribution, and, for the present, there are no ordinary market operations to alter the previous standard of values for these or for Domestic growths.

The "Weekly Wool Chart" makes the following comments:

February 21, 1918:

The official statistics in the "Labour Gazette" indicate that during the last complete week of January, in a group of firms employing over 32,000 workpeople in the worsted trade, there were 80 per cent working less than 55½ hours per week, 18 per cent working full time, and two per cent overtime. During the same week in the woolen trade, returns covering 18,258 workpeople showed about 50 per cent working less than 55½ hours, between 5 and 10 per cent working overtime, and the remainder full time. In other words 50 per cent of the operatives in the woolen trade are working full time or overtime as compared with 20 per cent in the worsted trade.

March 7, 1918:

The Prices of Tops.—The new schedule of prices of tops shows an all-round advance, which is quite in accordance with expectations, but very few anticipated that an equal amount in pence per pound would be applied to all qualities. When the last upward revision took place, low sorts were advanced to the extent of 3d. or 4d., whilst merinos and fine crossbreds were put up to the extent of 6d. or 8d. The latest rise works out at about 4 per cent

on merinos and 9 per cent on low crossbreds. All values are now well ahead of what was quoted when there was an open market in "free" tops in the early part of last year, and the advances in the latest schedule, when compared with the original schedule in operation up to the end of last November (1917) work out at over 10 per cent in merinos, and over 20 per cent in some of the lower crossbreds. The three schedules are given below for the purpose of comparison:

	First Schedule. January to Nov. 30, 1917.	Second Schedule. December 1st to March 31, 1918.	Third Schedule. April 1st to Nov. 30, 1918.
70's warp.....	70d.	77d.	80d.
70's ordinary	69d.	74d.	77d.
64's warp.....	69d.	74d.	77d.
64's ordinary.....	68d.	72d.	75d.
60's super	66d.	70d.	73d.
60's ordinary.....	64d.	69d.	72d.
58's carded	56d.	62d.	65d.
56's carded	52d.	55d.	58d.
50's carded	42d.	48d.	51d.
48's carded	36d.	42d.	45d.
46's carded	34d.	39d.	42d.
44's carded	33d.	37d.	40d.
44's prepared	32d.	36d.	39d.
40's prepared	31d.	34d.	37d.
36's prepared	30d.	33d.	36d.

July 4, 1918:

(Remarks by Sir Arthur Goldfinch, London, June 29th, on the English prices.)

The Purchase Price.—The basis of price is the same as in the two preceding contracts—viz., 55 per cent over the prices ruling in the 1913-14 season. This is equivalent to an average of 15½d. per greasy pound placed on shore in Australia for the total wool clip, but I may mention that in the last season 848 separate types of wool were included in the valuations, and the prices ranged between 10d. and 48d. per clean scoured pound. As in the previous contracts, it is definitely stipulated that the basis price shall be the final price as regards wool used by the British Government for military and naval purposes. As regards wool used for many other purposes, it is contemplated that a profit shall be made, and the Commonwealth Government reserves certain rights with regard to such profits.

I hope you will all agree with me in thinking that this far-reaching contract with Australia is an arrangement admirably suited to secure the interests both of the Commonwealth and of this country. It secures a remunerative cash price for the entire Australian production, irrespective of whether the wool can be shipped or not. It secures, so far as Australia can do so, the mili-

tary requirements of the Empire during the war, and also secures for the period of at least one year after the war the objects which are set forth in the report which has just been published of the Departmental Committee of the Board of Trade, on which distinguished members of the wool trade served, including Mr. Norman Rae and Mr. Theodore Taylor, M.P. These objects appear to be a matter of common agreement throughout the Empire. It is earnestly to be hoped that similar arrangements will soon be concluded with New Zealand and South Africa.

Values in America.—The remarks I have made conclude what I have to say on this subject from the strictly official point of view, but perhaps I may be allowed to remark, as a business man speaking to business men, how fortunate it appears to me that in the face of many disturbing factors the all-important question of price has been dealt with once more in a highly satisfactory manner. You are well aware that prices have been paid for wool during the last twelve months in North and South America very greatly in excess of the basis price agreed upon with Australia. It would, of course, have been quite impossible for the British Government to make a long contract for vast quantities of wool on the inflated basis of values which for some time past has existed in America. The price actually agreed upon is one which offers a good remuneration to the sheep farmer, and, at the same time, offers a basis for the manufacturing industry which can be reasonably looked forward to as likely to stand the test of the critical period following the close of hostilities.

Prospective Prices after the War.—I think it should be a matter of the greatest relief and satisfaction to the wool industry of this country that a fair prospect is offered in your trade of avoiding very great dangers which seem to hang over the heads of several other leading trades. We are living in such strange and perplexing times that we have of necessity to accustom ourselves to conditions which at any other time would have caused us the very gravest anxiety. I do not, however, think we ought to reconcile ourselves too readily to a continuance of the extraordinarily high prices which many commodities have reached. It is exceedingly difficult to believe that these high prices can continue after the war, and there seems to be a very great danger of a rapid downfall with most disturbing results. You will all agree with me that nothing is worse for trade and industry and for the livelihood of all who depend upon them than a state of prices which is regarded by bankers and financiers as dangerously high.

September 12, 1918:

Civilian Clothing.—Recent developments have concentrated a good deal of attention on the question of supplies of cloth and clothing for civilian wear. Considerable quantities of standard suits have now been made up by Yorkshire clothiers and will soon find their way into the hands of the retailers. So far as the ready-made trade is concerned it is largely a question of labor. Clothing manu-

facturers are required to place at least three-fourths of their productive capacity at the disposal of the Department. One trade writer in a monthly review expresses the opinion that there is sufficient cloth, even without further supplies, to last probably twelve months yet, but most of it is lying idle for lack of labor to convert it into clothing.

October 17, 1918:

The Manipulation of Short Wools.—A considerable amount of attention has been paid in Bradford to the potentialities of the short wools, which in normal times were so largely passed over by the trade in this country, but of which the German textile industry availed itself. An exhibition of fabrics manufactured from such wools is now taking place at the Bradford Technical College, and has aroused keen interest. They include various costume cloths, covert coatings, chequered fabrics, tartans, fancy fabrics, all wool taffetas, shirtings, velour cloth, crepe de laine, Indian shawls, cashmere velours, and rug fabrics in section ranges.

October 31, 1918:

The Wool Council.—The attention of the trade has to a large extent been absorbed by the formation of a Wool Council representative of all branches of the trade to deal with the various questions that will arise after the war. Everybody realized that a step of vital importance was being taken and the proposed powers and constitution of the new Council have been very carefully considered by the various trade organizations since last Thursday. In the early stages of State control there was a general feeling that the extraordinary number of trade associations should be brought together so that there could be unity of action in approaching Government Departments. Much has been done in the meantime to attain that end, but complete success has not yet been achieved. At present practically the whole of the trade is covered by four federated bodies—the Wool Textile Association of the United Kingdom, the Woolen and Worsted Trades' Federation, the Spinners' Federation, and the Woolcombing Employer's Federation.

On the initiative of the British Wool Federation, a joint meeting of representatives of the above bodies has been held and perhaps for the first time in the history of the trade, complete unity of action on a question of outstanding importance has been secured. This is one of the most satisfactory features of the present situation.

November 7, 1918:

The Wool Council and its Work.—The constitution of the new Wool Council, which is to be responsible for advising the Government on post-war questions affecting the wool textile trade, has been settled as the result of the recent trades conferences in Bradford and London. The Council, on the employers' side, will be com-

posed of nine manufacturers (woolen, worsted, hosiery, blankets, flannel, etc.), four worsted spinners, six representatives of the raw material end of the trade (importers, brokers, merchants, top-makers, etc.), one wooleomber, one exporter of tops and yarns, one home and export piece merchant, and one clothing manufacturer, making 23 in all, and to these are added 18 labor representatives. There are also to be 12 representatives of Government Departments, but these will have no voting power. In the original draft it was stated that the new Wool Council would deal with matters referred to it by the Government Departments concerned. This power to initiate business for discussion has been widened, and the Board of Control or any recognized trade association may also refer matters to the Council. One of the first duties of the Council will be to appoint a Reconstruction Committee to prepare plans and recommendations which will facilitate the turnover from war to peace conditions. Such proposals will then be submitted to the Wool Council, and afterwards passed on to the Standing Council on Post-War Priority. The Standing Council has been appointed to assist a Cabinet Committee on Post-War Priority composed of five members of the Government, under the presidency of General Smuts. In other words, the trade associations will be able to place their views before the Wool Council, the Wool Council recommendations will then go to the Standing Council on Post-War Priority; and, if necessary, the latter body will submit its proposals to the Cabinet Committee. That appears to be the general scheme of organization and it is already announced that the Standing Council "have had before them a survey of the existing stocks of the more important raw materials, and are giving urgent consideration to the question of releasing such materials from any form of control at the earliest possible moment." Nobody expects that wool will be released from control until a considerable period has elapsed after the declaration of peace, but it is generally understood that a strong claim will be made for the form of control to be greatly modified at an early date, especially as regards the distribution of raw material in this country. These and all other questions affecting the wool textile trade during the transition period will occupy the attention of the Wool Council.

November 28, 1918:

Wool Supplies in Great Britain.—A report on the present and prospective position of wool supplies in Great Britain was presented to the Wool Council last week by the Statistical Committee. The decrease in stocks on November 30, as compared with June 30, is entirely attributable to the diminished arrivals from Australia and New Zealand, which work out at a total 25,000 tons less than the estimated program for the five months, July-November. The principal features of the statistical report are as follows:

	Clean Scoured, in 1,000's.			
	Merino.	Crossbred.	E. Indian, etc.	Total.
Stock at June 30 (as per census, pounds).....	56,986	137,211	34,077	228,274
Estimated Stock Sept. 30 (pounds).....	43,145	136,076	32,003	211,224
Estimated Stock Nov. 30 (pounds).....	43,325	108,480	27,082	178,887
Estimated Stock Dec. 31 (pounds).....	47,613	105,222	26,332	179,167

The estimated receipts of wool and the rate of consumption during the second half of the year, and the effect of these factors on stocks are shown below:

	Pounds.	Pounds.
Stocks at June 30, 1918 (as per census).....		228,274,000
Estimated exports and consumption, July 1st		
— December 31st.....	220,955,000	
Estimated incomings, July 1st — December 31st	171,848,000	
Decrease		49,107,000
Estimated Stock, December 31st.....		179,167,000

It is estimated that the stock of 179,167,000 pounds clean scoured on December 31st will be made up as follows:

	Pounds.	Pounds.
Merinos { Combing.....	23,029,000	
{ Clothing, etc.	24,584,000	
		47,613,000
Crossbreds (Foreign and Colonial) { Combing....	4,959,000	
{ Clothing, etc.	32,962,000	
Crossbreds (British) { Combing.....	39,987,000	
{ Clothing, etc.	27,314,000	
		105,222,000
East Indian, etc.		26,332,000
Total		179,167,000

December 5, 1918:

The Wool Outlook.—The Statistical Committee has boldly tabled its estimates of the world's wool situation up to the end of 1920. Those engaged in the wool trade are accustomed to look well ahead, but as a rule they do not aspire to peer so far into the future as

two years hence. The most interesting feature of these figures is the estimate of consumption. They calculate that consumption during 1919 will be practically equal to the production. A comparatively slight increase of 80,000,000 pounds in the production of wool is predicted in 1920, but against this is set an increase of nearly 500,000,000 pounds in consumption. No doubt it is assumed that the wool textile industries of Germany and Austria will be in full swing in 1920, and that in the meantime the industries of the devastated regions will have been fully restored.

Wool Values Next Year.—Opinions are now being freely expressed with regard to wool values when there is a return to normal methods of trading. The general expectation is that there will be an open market soon after the middle of next year. Mr. Arthur Hill, Mr. Henry Whitehead, and Mr. J. W. Bulmer—all members of the Wool Council—agree that when the competitive system is restored “prices are not likely to settle down at a higher point than the present Bradford issue prices.” Spinners and manufacturers are naturally anxious that before the competitive system is re-introduced supplies shall be ample for all purposes.

The World's Wool Supplies.—The Statistical Committee of the Wool Council has made a preliminary estimate of the world's wool supplies for the next two years, and has published the following figures. It is mentioned that they are subject to correction as fuller and better information comes to hand. The estimates are as follows:

	Greasy Weight. Million Lbs.
Present world stock of wool	1,265
Add production estimated for 1919	2,673
	<hr/> 3,938
Less consumption estimated for 1919	2,620
	<hr/> 1,318
Estimated stock at end of 1919	1,318
Add production estimated for 1920	2,700
	<hr/> 4,018
Less consumption estimated for 1920	3,094
	<hr/> 924
Estimated stock at end of 1920	924

Sir Arthur Goldfinch, in his comments on the figures, said in this country we now held five months' stocks, and there was general agreement that an addition to our stocks of at least 300,000 bales was necessary to make the conditions safe and comfortable. On the Continent of Europe stocks of wool were probably not more than one-sixth of what they were five years ago. It would appear, therefore, that if the Continent were to be re-stocked on the 1913 basis the existing surplus in the wool-growing countries would be

absorbed without much difficulty. He suggested that financial considerations would have an important and perhaps a decisive effect in determining the balance between supply and effective demand, and quite clearly political conditions, such as the facilities to be accorded to Germany and Australia, would also weigh powerfully in the scale.

AUSTRALIAN 60's TOP.

The following are the quotations for an average super 60's top for the past seven years :

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
1912	24 $\frac{1}{2}$	24	24 $\frac{1}{2}$	24 $\frac{1}{2}$	25	25	26 $\frac{1}{2}$	26 $\frac{1}{2}$	26 $\frac{1}{2}$	26 $\frac{1}{2}$	27	28 $\frac{1}{2}$
1913	28	29 $\frac{1}{2}$	29 $\frac{1}{2}$	29 $\frac{1}{2}$	29 $\frac{1}{2}$	29	28	28 $\frac{1}{2}$	28 $\frac{1}{2}$	28	27 $\frac{1}{2}$	26
1914	27	28 $\frac{1}{2}$	29	29	30	30 $\frac{1}{2}$	30	30	26	30	30 $\frac{1}{2}$	25
1915	25 $\frac{1}{2}$	28	31 $\frac{1}{2}$	31 $\frac{1}{2}$	34	42	43	39 $\frac{1}{2}$	38	36	39	42 $\frac{1}{2}$
1916	43	44 $\frac{1}{2}$	42	42	45 $\frac{1}{2}$	49 $\frac{1}{2}$	51	52 $\frac{1}{2}$	52 $\frac{1}{2}$	52 $\frac{1}{2}$	—	—
1917	67	66	69	70	70	66	66	66	66	66	66	70
1918*	70	70	70	73	73	73	73	73	73	73	73	73

* Price controlled by Government.

OTHER COUNTRIES.

THE WOOL TRADE OF FRANCE.

The wool business in France, which was thoroughly disorganized because of the war, is trying to pull itself together and to again get upon its feet. Northeastern districts being freed from the invader are seeking to reëstablish their destroyed or dismantled factories and are attempting to secure supplies of raw material against the time when the mills may again be able to operate. We may be sure that French energy will not allow them to remain in idleness any longer than circumstances compel, although it will be many years before the wool manufacture of the country can regain the commanding position it occupied before the war.

The Chamber of Commerce of Mazamet in its report for 1917, that for 1918 not having yet come to hand, gives the following figures, continuing its report for former years, and while recognizing the difficulties arising from the destruction of mills, the lack of help, the cutting off of supplies from overseas and from the French colonies, yet expresses the utmost confidence in the future.

The exports and imports into the district were as follows:

EXPORTS.

	1917.	1916.	1915.	1914.
	Kilos.	Kilos.	Kilos.	Kilos.
Woolens }	1,677,677	1,502,671	1,956,842	1,672,768
Worsted }				
Flannels }				
Washed wool.....	8,064,254	11,085,942	9,408,769	20,191,885
Hosiery	290,393	339,249	335,598	225,455

IMPORTS.

	1917.	1916.	1915.	1914.
	Kilos.	Kilos.	Kilos.	Kilos.
Sheepskins.....	15,663,766	32,821,781	31,329,205	38,736,947
Greasy wool.....	400,884	2,725,052	4,189,272	1,114,821

In 1914 only 65,000 kilos were washed for war purposes in the Mazamet Conditioning House, in 1915, 3,621,000, in 1916, 4,348,055 kilos, and in 1917, 7,404,272 kilos. The following table shows the operations for the years 1914-1917.

	1917.	1916.	1915.	1914.
	Kilos.	Kilos.	Kilos.	Kilos.
Scoured for Military.....	7,404,272	4,348,055	3,621,000	65,000
“ “ the Trade ...	5,634,637	8,446,969	9,088,601	5,844,385
Total.....	13,038,909	12,795,024	12,709,601	5,909,385
Washed	4,633,412	4,578,266	2,501,384	14,555,916
Yarn	36,577	16,505	1,678	9,909
Weighing only	44,392	151,753	245,245	214,026
Total.....	17,753,290	17,541,548	15,457,908	20,689,236

Other Countries.

So little information has been received relative to the wool business of Italy, Spain and the central countries of Europe and South Africa that no attempt is made here to summarize it. It is hoped, however, that another year will bring about more normal conditions, so that it will be possible to obtain reliable statistical information of the wool industry in these nations.

Japan.

Anything that relates to the growth in industry in the Island Empire is of great interest. During several years past the Japanese government has sent several commissions to the United States, and elsewhere, to investigate manufacturing conditions, especially in the textile industries and as regards wool growing. Up to recent years there have been no sheep in Japan, but now a determined effort is being made to introduce these animals, with a view to furthering the wool manufacture of the islands. It would be interesting to follow the efforts thus being made, but space will not permit. At the present time her flocks number only 2,700 head, but there are at least three national sheep farms which are employed in raising sheep as breeders at the Government's expense. If climate and soil prove suitable no doubt the thoroughness of Japanese methods will in a comparatively short time produce a flock of respectable size, consisting of sheep especially adapted to the country. To carry on this work a bureau consisting of seven experts, with twenty assistants, has been established.

Large quantities of wool, tops and yarn have been imported of late years, and it is the purpose of the Government to make Japan independent of foreign countries for the supply of her factories.

The latest statement of the wool machinery capacity of Japan is as follows—the machinery appears to be working 24 hours per day.

36 Noble combs on merino, production....	18,000 pounds per day.
10 " " " crossbreds, "	10,000 " " "
151 Continental combs.....	41,525 " " "

It is proposed to add 45 Noble and 24 Continental in the near future.

There are 57,380 woolen, 173,000 worsted (mule) and 28,300 cap and flyer spindles.

THE RIVER PLATE.

The quantity of wool produced in Argentina and the number of sheep in this country continue to be mooted questions. On the authority of official census figures it is claimed that in June, 1914, there were only 43,225,452 sheep, not including lambs, in Argentina, to which if the lambs of the next season be added the total flock would amount to 56,000,000 head. In December, 1913, the sheep and lambs of the country were estimated to number 81,485,000. It does not seem possible that the census figures can be correct because, although there has been an undoubted loss in sheep in recent years, the statistics of the exports of wool do not indicate so great a reduction in the flocks. For the six years ending September 30, 1917, the exports of Argentine wools were as follows :

	Bales.		Bales.
1911-12.....	355,438	1914-15.....	304,517
1912-13.....	310,933	1915-16.....	299,207
1913-14.....	305,606	1916-17.....	348,226

and average 320,654 bales per annum. Last year for the corresponding period the exports were 288,051 bales, or 32,600 bales less than the average of the previous six years, but it must be remembered that an immense quantity of wool was not sent abroad because of the war exigencies, lack of shipping, etc. Therefore, there is no reason to believe that the production of Argentina has decreased in anything like the proportion that the sheep figures quoted would indicate. In fact wool dealers here conversant with the wool conditions in Argentina express themselves as satisfied that sufficient credit is not given to the wool production of the country, but that it exceeds by far the quantity credited to it. If their views are correct, the number of sheep must of necessity be greater than stated. Careful investigation will be made before another report, for the purpose of ascertaining the facts.

The imports of these wools into the United States for a series of years are given in the following tables. Though recent years have seen a great increase in imports of wool from these countries, owing largely to the restriction of supplies from Australasia, the last year marked a noticeable reduction in our imports from both countries. This again may be charged to the war's

account— viz.: embargoes, and difficulty in obtaining transportation.

IMPORTS OF ARGENTINE WOOLS INTO THE UNITED STATES FOR THE YEARS
1905-1918 INCLUSIVE..

Fiscal Year.	Class I.	Class II.	Class III.	Total.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
1905.....	41,094,617	362,562	41,094,617	47,695,567
1906.....	36,352,480	.....	5,815,447	43,167,927
1907.....	19,247,683	94,866	3,852,659	23,195,208
1908.....	14,311,508	.....	1,909,787	16,221,295
1909.....	51,601,420	106,239	6,672,175	58,379,834
1910.....	27,331,068	37,799	3,713,317	31,082,184
1911.....	14,014,295	96,326	3,780,755	17,891,376
1912.....	23,049,591	.....	4,572,037	27,621,628
1913.....	24,393,428	.....	2,349,156	26,742,584
1914.....	36,301,837	396,980	5,577,725	42,276,542
1915.....	67,076,718	90,212	10,641,323	77,808,041
1916.....	111,253,529	3,239,552	14,670,272	129,163,353
1917.....	185,446,149	7,769,359	14,754,584	207,970,092
1918.....	162,046,754	3,838,542	15,269,279	181,154,575

IMPORTS OF URUGUAYAN WOOLS INTO THE UNITED STATES FOR THE FISCAL
YEARS 1905-1918 INCLUSIVE AS SHOWN BY REPORTS OF UNITED STATES
DEPARTMENT OF COMMERCE.

Fiscal Year.	Class I.	Class II.	Class III.	Total.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
1905.....	7,044,752	619,377	76,180	7,740,309
1906.....	5,083,195	.....	3,995	5,807,190
1907.....	5,856,437	.....	174	5,856,611
1908.....	1,604,221	.....	.....	1,604,221
1909.....	5,759,852	.....	108,380	5,868,232
1910.....	8,768,627	.....	21,158	8,789,775
1911.....	711,525	.....	.....	711,525
1912.....	3,125,759	.....	91,229	3,216,988
1913.....	3,537,824	.....	181,049	3,718,873
1914.....	11,639,243	41,949	1,336,526	13,017,718
1915.....	16,561,154	18,334	18,135	16,597,623
1916.....	8,858,492	245,090	405,164	9,508,746
1917.....	34,710,261	.....	2,891,700	37,601,961
1918.....	17,488,372	90,383	830,256	18,409,011

The following table contains the latest available information of the exports and production of Argentine and Uruguayan wools. The table of shipments is not strictly comparable in the 1918 figures with those preceding, because these cover a ten months' period ending with April 30 in each year, while those for 1918 are for the full wool year. Of the exports 226,667 bales or over 60 per cent of the total were sent to the United States.

SHIPMENTS OF RIVER PLATE WOOLS BETWEEN JULY 1 AND APRIL 30
SUCCEEDING, 1905 TO 1918 INCLUSIVE.¹

In thousands of bales.

Year.	Dunkirk.	Havre.	Antwerp.	Hamburg. Bremen.	England.	United States.	Italy.	All Other.	Total.	Of which from Monte- video.
1905	135	6	50	129	28	41	3	27	419	74
1906	140	24	50	134	36	30	4	28	446	84
1907	135	13	56	103	43	24	4	23	401	71
1908	127	16	54	94	45	14	5	14	369	64
1909	202	5	67	123	57	48	8	32	542	122
1910	134	13	56	115	33	31	9	31	422	107
1911	125	5	49	112	49	18	8	31	397	87
1912	94	5	56	112	47	26	9	26	375	105
1913	94	6	47	121	70	28	14	35	415	135
1914	93	10	52	108	44	41	12	42	402	117
1915 ²	.....	2	.....	.....	78	118	93	86	377	73
1916 ²	1	12	.....	.....	33	163	65	70	344	44
1917 ²	.....	9.8	.....	.....	36.7	271.5	41.6	52.7	411.3	63.1
1918 ³	.....	29.6*	.....	.....	6.3	226.7	41.5	46.2	350.3	62.3

* And other French ports.

¹ Wool circulars of Wenz & Co., Rheims, to 1915.

² Report of Mr. Hamilton Coffey, Buenos Aires.

³ Twelve months to September 30.

The next table contains a statement of the production of River Plate wools for a period of twenty years, beginning October 1, 1895, and closing September 30, 1915. The reports for later years have not yet come to hand.

WOOL PRODUCTION OF ARGENTINA AND URUGUAY.

SEASON (October 1 to Septem- ber 30).	ARGENTINA.			URUGUAY.			GRAND TOTALS.		
	Quan- tity.	Ave. weight, Bales.	Total weight.	Quan- tity.	Ave. weight, Bales.	Total weight.	Quan- tity.	Ave. weight, Bales.	Total weight.
	<i>Bales. a.</i>	<i>Kilo. b.</i>	<i>Metric Tons. a. c.</i>	<i>Bales. a.</i>	<i>Kilo. b.</i>	<i>Metric Tons. a. c.</i>	<i>Bales. a.</i>	<i>Kilo. b.</i>	<i>Metric Tons. a. c.</i>
1895-96.....	443,0	380	168,3	100,0	466	46,6	543,0	396	214,9
1896-97.....	486,0	412	200,3	88,0	466	41,0	574,0	420	241,3
1897-98.....	495,0	417	206,5	90,0	466	42,0	585,0	424	248,5
1898-99.....	487,0	425	207,2	81,0	469	38,0	568,0	431	245,2
1899-00.....	465,0	429	199,4	85,0	470	40,0	550,0	435	239,4
1900-01.....	405,0	445	181,0	86,5	471	40,8	491,5	451	221,8
1901-02.....	444,0	445	197,6	86,0	470	40,4	530,0	449	238,0
1902-03.....	481,0	412	198,4	104,0	471	49,0	585,0	422	247,4
1903-04.....	416,0	420	174,7	86,0	470	40,4	502,0	428	215,1
1904-05.....	411,0	417	171,2	82,5	472	38,9	493,5	425	210,1
1905-06.....	395,0	417	165,0	90,5	450	40,7	485,5	423	212,9
1906-07.....	389,0	417	162,2	99,0	454	44,7	488,0	424	206,9
1907-08.....	427,0	417	178,0	110,0	460	50,6	537,0	426	228,6
1908-09.....	438,0	415	182,0	126,0	459	57,8	564,0	425	239,8
1909-10.....	359,0	413	148,4	123,0	458	56,4	482,0	424,8	204,8
1910-11.....	394,0	409	161,0	134,5	458	61,6	528,5	421	222,6
1911-12.....	361,0	409	147,7	155,5	458	71,2	516,5	424	218,9
1912-13.....	310,0	407	126,0	142,0	458	65,0	452,0	409	191,0
1913-14.....	306,0	417	127,6	119,0	466	56,0	e 425,0	432	183,6
1914-15.....	314,0	381	119,5	104,0	436	45,0	f 418,0	394	164,5

Add for local consumption, 1912-13, 16,800 bales; 1913-14, 14,500 bales, and 1914-15 10,000 bales.

a. Two 00 omitted, thus 443,0 = 443,000. b. Kilo equals 2.2046 pounds.

c. Metric ton equals 2,204.6 pounds. e. Add 14,500 bales for home consumption.

f. Add 10,000 bales for home consumption.

AUSTRALASIA.

Lacking our usual data from original sources, because of the Imperial Government's restrictions on statistical information, it is not possible to supply, at this time, the tables showing the facts of the year as respects the sheep and the wool product of these countries.

SHEEP IN AUSTRALIA.

A statement made by the President of the New South Wales Sheep-Breeders' Association gives the number of sheep in the Commonwealth in the two years 1916 and 1917 as follows:

	1917.	1916.
New South Wales	36,062,266	33,516,412
Victoria.....	14,760,013	12,576,587
Queensland	15,518,425	15,245,508
South Australia.....	5,091,000	3,800,000
West Australia	6,500,000	5,501,000
Northern Territory.....	50,000	50,000
Tasmania	1,700,000	1,620,000
	<hr/> 79,975,704	<hr/> 72,309,507

Heretofore no record of the sheep in the Northern Territory has been received. Assuming the above figures to be correct and allowing for the 50,000 sheep in the Northern Territory, the table indicates an increase of 7,666,197 sheep in 1917 over the number in 1916. It appears that the relative proportions of merino and crossbred sheep in 1900-01 were 83 per cent merino and 17 per cent crossbred, and that in 1916-17 these percentages had changed to 73.5 per cent merino and 26.5 per cent crossbred. This is an average for all of the States, but in some the relative increase in crossbreds has been much greater.

The British Government has purchased the wool clip of 1918-19 and unless some new arrangement is made it is anticipated that the usual wool auctions will be resumed in the beginning of the 1920-21 season. The price basis is the same as for the two preceding contracts, 55 per cent over the prices in the 1913-14 season.

According to the official report giving the results of the wool appraisement in Australia, supplied by the Central Wool Committee, the total quantity of wool submitted for the 1917-18 season in the Commonwealth was 569,629,520 pounds of greasy, and

47,340,403 pounds of scoured wool, or 616,969,923 pounds in all, equivalent to 1,909,958 bales and representing 518,849 lots. The dividend returned to the growers amounted to £6,094,693.

The average appraised price per pound of all wool calculated as greasy was 14.68d., and the difference between this average and the flat rate of 15½d. is equal to 5.59 per cent. A dividend of 5 per cent of the average appraised value was paid to the wool growers on August 21, thus practically returning to them the flat rate of 15½d. per pound on the greasy basis. The total flat rate value of the wool was £42,903,375.

The carry-over from the 1917-18 crop is large, and with reduced shipping facilities the storage question has become acute. When the stores that are now in course of construction are completed, there will be available over 2,500,000 bales of dumped wool (inclusive of wool brokers' warehouses).

After allocating wool to meet local requirements, the balance purchased by the Imperial Government was 599,909,940 pounds, valued at £39,576,420. The total expenses of the purchase amounted to £1,562,265, or ½d. per pound.

THE AUSTRALIAN CLIP.

No figures are at hand showing the amount of the Australian clip for the season 1917-18, but the quantity of wool appraised may be assumed to represent pretty nearly the quantity sheared.

The quantity credited to each State with the appraised value and average value per pound is as follows :

	Pounds, Greasy.	Appraised Value.			Average Value per Pound.
		£	s.	d.	
New South Wales.....	243,935,395	15,306,166	13	1	13.94
Victoria.....	160,598,495	10,822,247	18	1	15.41
Queensland	101,379,752	7,744,304	16	6	15.66
South Australia.....	60,051,299	3,515,306	19	3	13.59
West Australia	40,960,840	2,502,087	2	10	14.45
Tasmania	10,054,142	741,177	6	6	17.53
Total	616,979,923	40,631,290	16	6	14.68

NEW ZEALAND.

It is reported that the flocks of New Zealand are larger than ever before despite the fact that large numbers of sheep have been lost in the South Island because of snowfalls, which have been the heaviest for fifty years. Not so many merino sheep have been slaughtered for export as usual. The Romney Marsh sheep have suffered least from weather exposure and the Lincolns the most. It is considered that on the whole the general character of the flocks will be improved by the loss of the poorer sheep. The 1916-17 clip amounted to 546,300 bales and was valued by the Government appraisers at \$58,801,404, about \$107 per bale. The clip for 1917-18 appears to be of fair quality and heavier than that of last season.

The change from merino to crossbred has been more marked and more rapid here than in the Commonwealth. At the present time only 10 to 15 per cent of the flocks are merino, while 85 to 90 per cent are crossbreds. Twenty-five years ago the flocks were almost entirely merino, but because of the climate and the demand for a dual purpose sheep, that is one best suited for food and for wool, the change has come about and there is little probability of a swing of the pendulum in the other direction.

THE WORLD'S SHEEP AND THE WOOL PRODUCT.

Official statements of the number of sheep are very meagre in recent years. The disturbance of all business has made it impossible to secure the usual commercial estimates and the unwonted pressure of work on government offices has prevented the customary official estimates from coming to hand. It is only for the United States and the United Kingdom that definite statements can be made. From a few other countries later information than that contained in the Review of last year has been obtained and is embodied in the table. It must be remembered that the statement is by no means complete, nor up to date, but it is the best obtainable at present and as such it is offered. As stated elsewhere it is a question as to the number of sheep in Argentina, but the number given herewith is that of the latest official census of sheep of shearing age, to which is added the estimated number of lambs of the year.

NUMBER OF SHEEP IN THE WORLD ACCORDING TO THE LATEST AVAILABLE
REPORTS AND ESTIMATES.

Country.	Year.	Number of Sheep.
NORTH AMERICA:		
United States: Continental.....	1918	¹ 48,900,000
Noncontiguous, except Philippine Islands:		
Hawaii .....	....	76,719
Porto Rico.....	....	6,363
Alaska .....	....	199
Total United States.....		48,983,281
Canada	1917	2,009,000
Newfoundland .....	....	97,597
Mexico	1902	3,424,430
Guatemala .....	....	514,000
Other Central America.....	....	124,044
Cuba .....	....	9,982
British West Indies.....	....	27,980
Dutch " " .....	....	22,643
Guadeloupe.....	....	11,731
		6,241,407
Total North America.....		55,224,688
SOUTH AMERICA:		
Argentina (census of 1913, 43,225,452 plus lambs)	1914	¹ 56,000,000
Brazil	1916	7,205,000
Bolivia	1910	1,454,729
Chile.....	1914	4,602,317
Colombia .....	....	746,000
Uruguay	1915	25,000,000
Venezuela .....	....	177,000
Falkland Islands .....	....	705,000
Other South America .....	....	300,000
Total South America.....		96,190,046

¹Includes lambs.

NUMBER OF SHEEP IN THE WORLD, ETC. — *Continued.*

Country.	Year.	Number of Sheep.
EUROPE:		
Austria Hungary	1910-13	12,337,867
Belgium.....	....	235,722
Bulgaria.....	1910	8,632,388
Denmark, Iceland, and Faroe Islands....	1914	1,246,000
Finland .....	....	1,309,000
France	1917	10,587,000
Germany	1916	4,000,000
Greece .....	....	3,547,000
Italy	1908	11,162,926
Montenegro.....	1917	521,000
Netherlands .....	....	520,275
Norway	1916	1,281,000
Portugal.....	1906	3,072,988
Roumania	1916	7,811,000
Russia in Europe.....	1914	42,736,000
Saxony .....	....	58,185
Servia	1910	3,818,997
Spain	1915	15,994,608
Sweden	1916	1,198,000
Switzerland.....	1917	172,000
Turkey.....	1910	21,190,000
United Kingdom, including Isle of Man, etc.	1916	28,770,692
All other Europe.....	....	20,000
Total Europe		180,222,648
ASIA:		
British India:		
British Provinces.....	1914	23,091,955
Native States.....	1914	8,306,000
Total.....		31,397,955
Ceylon	1913	64,000
Cyprus	1912	265,000
Japan	1917	2,786
Philippine Islands	1913	103,000
Russia in Asia	1912	33,331,000
Turkey in Asia.....	1912	27,094,678
Other Asia.....	....	60,000
Total.....		60,920,464
Total Asia		92,318,419

NUMBER OF SHEEP IN THE WORLD, ETC. — *Concluded.*

Country.	Year.	Number of Sheep.
AFRICA :		
Algeria	1912	8,338,023
Basutoland .....	....	1,369,000
British East Africa .....	....	6,550,000
German East Africa	1913	6,439,647
German South West Africa	1912	555,000
Madagascar	1911	168,000
Rhodesia	1911	300,000
Soudan (Anglo-Egyptian)	1909	830,000
Tunis	1914	1,119,000
Uganda Protectorate	1914	542,000
Cape of Good Hope } Natal } Orange Free State } Union of Transvaal } South Africa }	1913	35,710,843
All other Africa .....	....	3,000,000
Total Africa		64,921,513
OCEANIA :		
Australia	1917	76,669,000
New Zealand	1918	26,355,000
Total Australasia		103,024,000
Other Oceania .....	....	10,000
Total Oceania		103,034,000
Total World		591,911,314

The total number of sheep in the world as reported one year ago was 604,762,701 against 591,911,314 at the present time, and shows a net decrease of 12,851,387. The reduction, so far as figures go, is accounted for by the change in the Argentine figures to correspond with her latest census. There has probably been an increase in Australasia, but details are not available at the moment and doubtless the flocks of Europe have been considerably depleted.

WOOL PRODUCTION OF THE WORLD.

COUNTRY.	WOOL.
	<i>Pounds.</i>
North America:	
¹ United States.....(1918)	299,921,000
British Provinces	11,400,000
Mexico	6,500,000
Total North America.....	317, 21,000
Central America and West Indies.....	750,000
South America:	
Argentina	258,250,000
Brazil.....	35,000,000
Chile	20,000,000
Peru.....	9,420,707
Falkland Islands.....	3,200,000
Uruguay.....	139,250,000
All other.....	5,000,000
Total South America.....	470,120,707
Europe:	
Austria-Hungary.....	41,600,000
France.....	65,000,000
Greece.....	16,000,000
Germany	25,600,000
Italy.....	21,500,000
Portugal.....	10,000,000
Russia in Europe.....	320,000,000
Spain.....	52,000,000
Turkey and Balkan States	90,500,000
United Kingdom.....(1917)	125,176,066
All other.....	30,000,000
Total Europe.....	797,376,066
Asia:	
British India.....	60,000,000
China.....	50,000,000
Persia	12,146,000
Russia in Asia	60,000,000
Turkey in Asia	90,000,000
All other	1,000,000
Total Asia.....	273,146,000
Africa:	
Algeria.....	33,184,000
British Africa	157,761,470
Tunis.....	3,735,000
All other	13,000,000
Total Africa.....	207,680,470
Oceania:	
Australia and Tasmania.....	² 547,972,000
New Zealand	193,830,000
Total Australasia	741,802,000
All other.....	100,000
Total Oceania.....	741,902,000
Total world.....	2,808,796,243

¹ Estimate of the U. S. Department of Agriculture.² Australian figures heretofore have not included quantities used in that continent.

WOOL PRODUCTION OF THE WORLD.

What has been said respecting the world's flock of sheep applies with even greater force to the world's wool production. Practically no statistics, except for the United States for 1918 and for the United Kingdom for 1917, are available at this time. Therefore, the table contained in last year's Review is reproduced, with no change except the addition of the increase of 14,348,000 pounds of the United States clip and 3,976,023 pounds to that of the British Isles. There appears, therefore, to be an increase in the world's wool product, as shown in the table, but in making any comparisons or calculations based on these figures allowance must be made for a large falling off in Europe and for the lack of information from Australasia, where there is believed to have been an increased production.

WILLIAM J. BATTISON.

AFTER-THE-WAR READJUSTMENT.

HOW THE WOOL MANUFACTURE MET THE SITUATION
FOLLOWING THE ARMISTICE.

WHEN the armistice between the Allied and the Central Powers was signed on November 11, 1918, it found war preparations in the United States under full, strong headway—and this was true of the wool and woollen industries as of all other activities essential to the prosecution of the war. During the autumn of 1918 co-operation between the Government and the manufacturers had steadily continued. On September 26, a Wool Advisory Committee, with Mr. John W. Scott, Chief of the Textile Division of the War Industries Board, as chairman, was organized in Washington, including representatives of the War Trade Board, the Shipping Board, the army, the navy, the Marine Corps, the Emergency Fleet Corporation and members of the War Service Committee of the Wool Manufacturing Industry. This committee, it was stated, “insures the complete study and review of all angles of the wool and woollen situation, and will enable the War Industries Board to act promptly to meet new situations that may arise in the wool and woollen industries.”

On October 1, 1918, the War Service Committee of the Wool Manufacturing Industry gave out the following significant notice:

Based on information in the possession of the War Service Committee, it becomes evident that the cloth needs of the Quartermaster Department for army purposes in the immediate future will be materially reduced.

The facts of the situation are that in and during the early emergency conditions incident to our entering the war, a larger percentage of the production of our industry was essential to acquire and create the necessary surplus and reserves, as well as to take care of the clothing of the army as organized, than could be needed to carry on the work for the future.

In other words, to meet the emergency, it was necessary to crowd into a short space of time a maximum production,

which could not continuously be required. It, therefore, becomes clear that in the immediate months to come the total percentage of machinery which the Government can continue to employ must be reduced.

It is not possible to be more specific at this time, but the general fact is submitted, recognizing that it will be of interest to the industry.

This declaration had been generally anticipated by the trade, and it led manufacturers to consider ways and means of reëstablishing civilian business. On October 16, a meeting of the new National Association of Worsted and Woolen Spinners was held in New York, and a statement of conditions in the spinning trade was adopted and sent by President A. T. Skerry, Jr., to Mr. Herbert E. Peabody, Chief of the Woolens Section of the War Industries Board in Washington. President Skerry said:

Our Association stands ready to make any reasonable sacrifice necessary on account of the war, but statements emanating from the members of various branches of the Quartermaster Department convince us that the Government is in no immediate danger of being short of such goods as are made of worsted or woolen yarns; that the Government has been and is actually accumulating a surplus of certain grades of wool; that the Government owns wools in foreign countries for which, if the Government wanted to get them here as much as the spinners need them, it would probably find some means of shipment; that the Reclamation Bureau is now saving large amounts of clothing for the men in American camps—an item not included in the original estimates of the wool required.

Is it not, therefore, wisdom on the part of the Government to release wool for civilian work and so enable the mills to keep their organizations in such condition that if the Government is to need more goods the mills will be in a position to handle the work immediately it issues its demands?

This statement was immediately taken under careful consideration by the War Industries Board.

On October 22 the War Service Committee of the Wool Manufacturing Industry announced:

Due to negotiations between the War Industries Board, Washington, and the War Service Committee of the Wool

Manufacturing Industry, we are authorized to say that the Quartermaster Department will enter the market early next week for shirtings, suitings, overcoatings, blankets, jerkin linings, and cap cloths.

Announcement to bidders will be made early in the week. Details will be available upon application either at the Woolens Branch of the Quartermaster Department, 109 East 16th Street, New York City, or at this office.

This action by the Quartermaster Department does not involve the distribution of wool for civilian purposes as to which the committee has no authoritative information.

That is to say, the Government frankly and promptly recognized the conditions which the Government itself had created in the woolen industry, and advanced its wool program to keep the mills running. Not only did the War Department act, but the Navy Department also moved to cooperate with the Quartermaster General by placing immediate contracts instead of holding off until the early part of 1919. For the army, bids for 20 ounce olive drab melton were invited to be opened November 9, for 9½ ounce shirting flannel November 8, for 32 ounce olive drab overcoating November 11, for 20 ounce overseas cap cloth November 12, for 26 ounce jerkin lining November 12, and for four-pound olive drab blankets November 28—all at the Clothing and Equipage Division of the Quartermaster Department, 109 East 16th Street, New York City.

This renewal of government orders to the amount of many millions of yards gave new confidence to the industry, though there was no promise that wools would be available for civilian fabrics. On November 1, the War Service Committee of the Wool Manufacturing Industry, acting on behalf of the Woolens Section of the War Industries Board, issued the following statement:

1. The Woolens Section of the War Industries Board feels that it is desirable to refute rumors of allocation of wool for civilian needs in the near future and to make the following statement:

2. The Quartermaster General has ascertained his minimum requirements for the remainder of 1918 and for the first half of 1919. The Shipping Board has carefully estimated its ability to provide tonnage for taking care of the Quarter-

master General's program without interfering with the movement of troops and supplies. Due consideration has been given to the present stocks of wool in the hands of the Quartermaster General, to the desirability of not permitting unduly large reserves of wool to accumulate in army hands at the expense of civilian needs; and full weight has been given to every other factor that could have bearing on the situation. All figures obtainable have been carefully weighed in the light of the available knowledge of the military and shipping situations. The Woolens Section would gladly make public all of the figures and facts in its hands if it were not so clearly against wise military policy to do so.

3. After thus considering every pertinent fact and reasonable probability, the Woolens Section is obliged to conclude that stocks of wool in the possession of the Quartermaster after the immediate needs of the Government have been provided for, will leave a surplus so small as to preclude any allocation for civilian purposes in the immediate future. Additional supplies of wool for the army and for civilian purposes are entirely dependent upon future importations until the domestic clip of 1919 is available for use. This situation makes it clear that no allotments of wool for civilian purposes can be considered for some time to come. Having reached this conclusion on evidence it must accept, the Section considers it to be its duty to make public a definite announcement of this fact.

4. This announcement is made for the purpose of removing uncertainty from the situation for the next few months. The industry may rest assured that allotments for civilian use will be made as soon as this can be done without impairing military operation.

5. Requests from different sources that sufficient wool should be apportioned to manufacturers to enable them to keep their organizations together and to continue in operation are impossible to meet. But the Quartermaster General, having the seriousness confronting manufacturers in mind, has advanced his buying program and has offered his needs for bids covering the first quarter of 1919, in so far as his stocks of wool will permit. The action of the Quartermaster General provides regular employment for machinery in volume only slightly reduced from the deliveries now being made to him.

6. With the stock of wool now actually on hand and free against new contracts and the uncertainties that surround importations, the Quartermaster General is compelled to conserve every pound of wool. The Woolen Section believes that

in advancing his program the Quartermaster General has provided the only relief for the industry which may be found at present.

THE ARMISTICE—CIVILIAN WOOL RELEASED.

But the actual signing of the armistice brought a quick shifting of the situation. This armistice, as has been said, was signed on November 11. Two days later, on November 13, Director General R. E. Wood, acting Quartermaster General, sent instructions to the government wool distributor to release to manufacturers for civilian use such wool as was at the time available.

General Wood said:

Pending the announcement by the War Industries Board of a definite plan for disposing of the wool stock belonging to the United States army, in order that there may be no cessation of manufacturing due to lack of raw wool, the Government wool distributor has been instructed to release to the manufacturers for civilian use, a limited amount of such wool as may be available. The price will be the present Government issue price; terms of sale, price on presentation of document.

This release of wools for civilian account was very necessary to save the situation, for soon after the signing of the armistice the War Department announced that it would make no awards on the basis of the new bids called for, and that pending contracts for the manufacture of army fabrics would be readjusted, with a view to putting an end to large-scale production of army goods as soon as possible.

To allay anxieties in the trade, the War Service Committee of the Wool Manufacturing Industry on November 18 sent the following message to mills throughout the country:

The War Industries Board has authorized the War Service Committee to issue the following statement:

Recognizing that it is desirable and, in so far as possible, essential to accomplish the transfer of the industry from a war to a peace basis with as little dislocation or injury to capital and labor as is possible under the new conditions, the War Department is now in daily conference with the War Industries Board, in Washington.

The War Department will shortly issue a statement of the broad general policies covering the proposed transfer. Until that statement appears, it is hoped that the industry will not become unduly agitated.

The War Department indicated that there is no intention on the part of the Government to evade or arbitrarily cancel existing contracts. Furthermore, it is indicated that where mills are behind in deliveries through unavoidable delays, there will be no disposition to take technical advantage of that fact.

Meanwhile, as a further step toward a peace basis, priority shipments to war industries were abandoned on November 18 by the Government.

On November 23 the zone supply officer of the Quartermaster Corps of the United States army notified manufacturers that delivery would be accepted upon the amount of yards or blankets that manufacturers would have produced prior to December 21 running at the average rate of production of each mill for the period of four weeks ending November 9. Such yardage would be accepted at any time prior to February 1, thus allowing manufacturers to run part time if necessary to hold their organizations, pending the stopping of civilian work. Manufacturers were further notified that the Government desired them so far as possible to take on civilian business as rapidly as possible, and that further delivery of any part or all of goods contracted for would not be required if manufacturers so desired. Manufacturers who had any surplus government wool or partly finished material made out of government wool were authorized to use these for civilian business, the Government to allow them the difference, if any, between the cost of such wool or material and what the cost would have been if the wool used had been purchased at average prices during the month of December.

ARMY CLOTHING IN ABUNDANCE.

On November 26 the War Department announced that there were on hand in clothing and equipage enormous amounts of completed clothing and equipment, the value of

which was unofficially estimated to be about \$750,000,000. For example, there were 6,282,536 wool coats, 2,449,018 jerkins, 4,167,841 overcoats, 8,581,829 wool trousers and breeches, 8,586,830 wool spiral puttees, 25,042,752 pairs of heavy wool stockings and 21,070,492 pairs of light wool stockings, 6,415,846 pairs of woolen gloves, 1,413,492 three-pound blankets and 2,562,287 four-pound blankets. It was subsequently stated that there was in the possession of the Government a full uniform equipment for one year for an army of 3,500,000 men, and that very great quantities of uncut cloths were also available.

On November 26 an important conference looking to the readjustment of Government business was held in Washington, between the War Industries Board and representatives of the wool manufacturers, wool merchants, wool growers and clothing manufacturers and dealers. This exchange of views was helpful toward a better understanding of the question.

The War Service Committee of the Wool Manufacturing Industry urged upon the War Industries Board that the great supplies of wool in the possession of the Government be disposed of by public auction without restrictions.

On December 8, Secretary Baker, in presenting the annual report of the War Department, said that the total wool clothing purchases of the War Department had been as follows:

	Total Purchases April 1, 1917, to Nov. 2, 1918.	Total Outstanding Contracts as of Nov. 2, 1918.
	<i>Value.</i>	<i>Value.</i>
Blankets	\$128,670,000	\$26,282,000
Breeches and trousers, wool.	107,522,000	48,682,000
Coats, wool	116,031,000	31,171,000
Drawers, winter	65,786,000	17,716,000
Overcoats	92,334,000	9,967,000
Shirts, flannel	74,533,000	20,132,000
Shoes, field and marching	162,639,000	23,806,000
Stockings, wool, light and heavy	38,230,000	20,608,000
Undershirts, winter	56,000,000	11,906,000
Total	<hr/> \$841,745,000	<hr/> \$210,270,000

The following are also the figures for the more important clothing supplies shipped overseas to October 31:

	<i>Quantity.</i>	<i>Value.</i>
Blankets	2,592,000	\$20,736,000
Breeches and trousers, wool	4,080,000	27,336,000
Coats, wool.....	3,353,000	32,825,870
Drawers, winter	9,679,000	19,358,000
Overcoats	1,321,000	16,076,570
Shirts, flannel	4,909,000	17,181,500
Shoes, field and march, pairs.....	8,439,000	48,554,150
Stockings, wool, light and heavy, pairs	26,501,000	11,925,450
Undershirts, winter	9,248,000	18,496,000

It was determined by the War Industries Board to dispose of Government wool stocks by public auction, but to establish certain minimum prices. Under this arrangement the first series of wool auctions was held at Ford Hall, Boston, on December 18, 19 and 20, 1918—about 16,000,000 pounds of domestic and foreign wools being offered. Attendance was large and bids were fairly active—but considerable quantities of the wools offered were withdrawn by the Government because the bidding did not reach the requisite “upset price.” Meanwhile, the War Industries Board was completing its work in view of the ending of active hostilities. On December 20, the Textile Division of the War Industries Board, with the exception of the Wool Section, was officially mustered out—Mr. John W. Scott, Chief of the Division, leaving for his home in Chicago, and Mr. Herbert E. Peabody, Chief of the Woolens Section, departing on the following day to New York. Both of these officials had performed their duties eminently to the satisfaction of the wool manufacturing industry and of the Government, and both were heartily congratulated and commended by those who had had occasion to do business with them.

Further wool auctions were held in Boston on December 31, January 2 and January 3, with a somewhat smaller attendance and a lessened activity. Again considerable quantities of wools for which no adequate bids were secured were withdrawn by the Government.

On January 10 all restrictions upon the importation of raw wool, wool tops, noils, yarns and wastes from all non-enemy countries were withdrawn by the War Trade Board.

The War Service Committee of the Wool Manufacturing Industry is continuing in existence for the present to serve as a needed medium of communication between the industry and the Government so long as its work may be required. But its distinctively war work has been accomplished, and Chairman Clark and his colleagues, who have given generously of their time and energy to their work, have every right to ask a release as soon as possible.

Thus is closed the record of the manner of coöperation of the American wool manufacture with the Federal Government in the great war, in 1917 and 1918. It can be said that the initial response of the industry was prompt, that its work was well planned and faithfully executed, that again and again responsible Government officials expressed gratification with the policy and methods of the wool manufacturers of the country and of the committees representing them, that the Government procured its supplies of wool fabrics at a fair, reasonable price, and that the resources of the industry proved sufficient, when they were once availed of, not only to supply the current requirements of our army and navy, but to accumulate a considerable surplus against any failure of communications or unforeseen emergency needs. Altogether the record is highly creditable, and a fine example of the strength which a government derives in time of war from the possession of great, strong national industries, fostered through the years by far-seeing legislation.

WINTHROP L. MARVIN.

AFTER-WAR PROBLEMS.

PROFESSOR CHERINGTON'S FORECAST OF CONDITIONS
THAT WILL CONFRONT THE WOOL MANUFACTURE.

PROFESSOR PAUL T. CHERINGTON of the Graduate School of Business Administration, Harvard University, who has been rendering important service to the United States Shipping Board, delivered before the Textile Group of the War Service Convention of the Chamber of Commerce at Atlantic City, December 5, 1918, an address of particular significance to the wool manufacturers of this country. His theme was "After-War Problems of the Woolen and Worsted Industries." Mr. Cherington's survey of the situation is so timely and significant that it is presented in full, as follows:

All of the numerous problems in the woolen and worsted industries which have been raised by the sudden end of the war may be summed up in a single one, namely: How can these industries be put as promptly as possible on a solid peace basis?

It will be observed that in stating the problem this way, the use of the term "restoration" (with its necessary assumption that pre-war conditions are to be returned to) is scrupulously avoided. As a matter of fact, the pre-war conditions never can be returned to. The conditions to which readjustment must be made are partly made up of the conditions prevailing before the war, and partly of entirely new conditions which are the direct result of the fact that the war has existed. In some respects the conditions which must be met are similar to those which prevailed before the war; in others they are radically different, but in any case, the new combinations of conditions will present new problems calling for new solutions.

The solutions which are called for, moreover, will be obliged to take into account the interrelations between the problems presented. Thus no piecemeal or provincial solu-

tion will serve the purposes. The industries must be adjusted to the new conditions with due recognition of facts which are now intimately interdependent, while in normal times the connection between them might have been comparatively loose.

The problems of the sheep man of Wyoming are more intimately connected than ever before with those of the clothing retailer and of every other factor in the wool industries and trades. With these features of the problem in mind, it is my purpose in this discussion to set forth as briefly as possible:

1. A statement of some of the main features of the pre-war conditions.
2. A summary of the effects of the war on these industries.
3. A listing of some of the most urgent conditions now to be dealt with.
4. A program of undertakings necessary to meet these conditions.

PRE-WAR CONDITIONS—INTERNATIONAL.

The annual pre-war production of wool for all countries combined was about 2,800,000,000 pounds per year. Of this amount ordinarily about 1,000,000,000 pounds consisted of worsted wools of the various crossbred types. Another 1,000,000,000 was made up of clothing wools of finer types with more merino blood and classed as merino wools. The remainder, between 700,000,000 and 800,000,000, consisted of coarse wools ordinarily designated as low or carpet wools.

Approximately 90 per cent of the merino wools in the world's supply under ordinary circumstances were grown in the countries allied against the Central Powers. Most of the remainder came from South America. Of crossbred wools, the Allied countries controlled the principal sources. In the case of carpet wools apparently not over one-half of the total was contributed by the Allied countries. The Turkish Empire was the principal enemy country producing wools of this type, while China ranked first among the inactive belligerents and neutral countries as a producer of coarse wool.

No accurate figures covering the wool movement before the war exist, but the following estimate based on such figures as are available probably represents a fairly accurate statement of the main features of the world's wool trade.

The Allied countries produced about 1,144,000,000 pounds, imported 1,823,000,000 pounds, and exported 1,302,000,000 pounds, making their net consumption 1,665,000,000 pounds. The British Empire with the Australia, South Africa, and British clips and the highly organized wool trade of the United Kingdom controlled the situation. The countries classed as neutral held a strong position in the world's wool trade with the Argentine as the chief factor. Their combined production of 583,000,000 pounds, imports of 73,000,000 pounds, and exports of 627,000,000 pounds showed them to be large producers of wool with small home consumption (31,000,000 pounds and proportionately heavy exports). The Central Powers, before the war, together produced approximately 277,000,000 pounds, imported 540,000,000 pounds, and exported 112,000,000 pounds, giving them a combined net consumption of 705,000,000 pounds, assuming that stocks on hand remained approximately uniform.

The British Empire controlled the wool situation in all except low or carpet wools. Outside of the British Empire, the Allied countries consumed practically all of their own production of the finer wools and imported the remainder of their requirements. The River Plate countries and Spain among the neutrals had a large exportable surplus, the exports from the former being extremely large and important. Of the enemy countries both Austria and Germany were large importers of fine wools. The production of wool in these countries, while actually large (notably the fine wools of Saxony), did not meet more than a relatively small part of the wool requirements of the central empires.

Of the low wools, Russia in pre-war times produced the greater part. Turkey and China were also important factors.

PRE-WAR CONDITIONS—AMERICAN.

The American woolen and worsted industries since 1861 (with the exception of three years from 1894 to 1897) have

been highly protected by a customs tariff; in fact, almost continuously since a protective system was first discussed in this country, the wool growing and manufacturing industries have been regarded as among those most completely justifying protection. By the tariff adopted in 1913 the industry was put on a new footing. No matter what may be one's views with respect to the tariff, the most conspicuous single fact in connection with a consideration of American conditions is the fact that for over fifty years wool growing and wool manufacturing in the United States had been protected industries and that the Underwood tariff put them on a new basis.

A second point of conspicuous importance in connection with American pre-war conditions was the complexity of the raw material supply of the manufacturing industries in this country. If we include the low wools, approximately three-fifths of the new wools annually used by the American industry were imported; notwithstanding the tariff, Australia, South America, and South Africa contributed most of the fine wools, and a very substantial portion of the importations of these and carpet wools as well came through British hands, much of it coming by way of Great Britain.

So far as the manufacturing organization of the American manufacturing industries is concerned, pre-war conditions were reasonably satisfactory. The degree of manufacturing efficiency in the case of standard fabrics was actually very high. In the case of fancy fabrics we may have lacked some of the originality of European manufacturers in the matter of design, but intrinsically many of the fabrics produced here were the equal of competing products of European mills and were produced fully as efficiently as they.

Labor conditions in this country on the whole compared favorably with those of competing countries, except in the matter of wages, which were substantially higher than in the chief competing countries.

In the conditions surrounding the marketing of their products, American woolen and worsted industries had, on the whole, some advantage over most of their competitors. They had near at hand, behind a tariff barrier, the largest free trade area in the world, and this area supported a population

with an extremely high per capita purchasing power. The conditions surrounding consumption of fabrics and clothing made from them were such as to constitute a distinct advantage for the American manufacturer as compared with his principal foreign competitors.

This bare enumeration of some of the conditions surrounding the American industry up to 1914 make it clear that the removal of the tariff on wool and of the compensating duties on manufactures marked the beginning of the new conditions for the American industries. These conditions had been barely set up when the war began in Europe.

EARLY WAR CONDITIONS.

The changes which took place as the various sections of the Underwood Tariff Act went into effect, resulted in numerous readjustments, some of which had been foreseen, while others were entirely unexpected. Whether these changes would have resulted favorably or unfavorably to the American industries of this group there was not time enough to determine. Opinions on both sides are plentiful.

The facts are, that before the industries became adjusted to the new tariff conditions, orders began coming in for providing clothing and other wool products for the Allied armies, and the consumption of raw wool and the output of wool fabrics showed large gains during the next two years.

Domestic civilian business showed substantial increase at the same time that these European war orders were being executed. The war prosperity in the country was widespread and the woolen and worsted industries had their full share of its benefits. Thus, direct war orders and abnormal activity on domestic consumption gave the American industries two years of heavy business at profitable prices.

LATER WAR CONDITIONS.

With the entry of the United States into the war in the early part of 1917, the position of the American woolen and worsted industries was radically changed. American army purchases were heavy and by the end of the year perhaps one-third of the loom capacity of the country was engaged on

the army contracts. With the rapid expansion of the army program, the percentage of army contracts in comparison with the total capacity of the mills increased. The Government became literally the main market for the industry. By the middle of 1918 it was estimated that practically 60 per cent or perhaps as much as 70 per cent of the woolen and worsted production capacity of the country was engaged in army work. The industry was on a war basis.

Beginning with April, 1918, the Government began to exercise its option on imports of raw wool and it also took over the domestic clip of 1918, both of these purchasing activities being conducted through the army. Civilian stocks of wool in the hands of manufacturers apparently were large at the beginning of 1918, but, with no source open from which to replenish these supplies, they were rapidly depleted. By the end of 1918 it was estimated that the actual amount of wool in the manufacturers' hands for the production of civilian fabrics would represent civilian consumption for only a few weeks. In other words, not only had the Government become the chief market for wool products, but it had become the actual owner of practically all of the supply of new raw material in the country.

The expansion of the military program introduced another factor which had not been foreseen. With the rapid consumption of wool for initial equipment and for the maintenance of an army such as was contemplated, in addition to the military consumption already going on, it became certain during 1918 that the amount of wool available in the world, the conveying of which to this country was possible, would not permit more than a restricted allotment of wool for civilian uses if the army program was to be carried out.

The activities of the submarines and the increased military program created a serious shortage of ships available for moving wool from remote sources of supply to the United States. The result was that by the middle of September, 1918, it was evident that while the military importations must continue, civilian consumption could not count on the army being in a position to release any substantial quantity of wool for several months. Announcement to this effect was made

by the War Industries Board as soon as possible after it became evident that the condition existed.

THE EFFECT OF THE ARMISTICE.

The collapse of the German military organization brought hostilities to an end unexpectedly on November 11. The program for the expansion of the army was abandoned over night, and the consumption of wool by the army was immediately reduced from a campaign to a maintenance basis.

The military authorities and the wool industries were thus at once confronted with wholly unexpected conditions. A supply of uniforms, cloth and wool, which on November 10 was regarded as dangerously little more than the indicated needs of the army, on November 11 became sufficient to take care of military requirements for months and leave a huge surplus of raw wool to be disposed of. This is a condition which could not have been foreseen and which it would have been foolhardy to have counted upon.

ACTUAL CONDITIONS—INTERNATIONAL.

This brief statement of some of the main events of the past three years in these industries makes it clear that, with the sudden ending of the war, the industries have been confronted by an enormously complex group of problems. Many of these have to do with our own conditions here in the country, but the fact should not be lost sight of that back of these, and forming a conspicuous element in many of them, lie a group of international problems of equal or even greater importance.

So far as the world's supplies of raw wool are concerned, a bare enumeration of some of the problems which now must be met will serve to indicate the nature of some of these international factors and their bearing on any program which may be developed for handling the domestic situation:

1. Supplies of raw wool for the Allied countries most heavily engaged in the war should be guaranteed.
2. The supply of clothing and of sufficient supplies of wool to enable the prostrated belligerents to clothe their people and to establish their wool industries should be provided for immediately.

3. Profitable markets and adequate means for reaching them should be provided in such a way as to guarantee to Russia a maximum return from her accumulated supplies, and her probable continued production of low wools.

4. The wool of the River Plate countries (the chief neutral supply of fine wools), ought not under any circumstances be allowed to slip from control of the chief Allied wool-consuming countries.

5. For the lesser belligerents and certain neutrals (such as Spain) arrangements should be made for adequate markets for the raw wool they grow and for suitable supplies of woollen goods for a period long enough to permit commerce to at least partially right itself.

6. So far as the Central Powers are concerned, the chief problem for consideration is the imposition of such terms as will give them their necessary fine wool supply and provide a market for the Turkish low wools upon conditions compatible with the purposes and outcome of the war. In other words, their people must be kept from freezing, their industries must be restored, at least to a sufficient extent to permit the countries to remain solvent, but these should be made possible as concessions and on stipulated conditions.

ACTUAL CONDITIONS—DOMESTIC.

A similar enumeration of some of the more conspicuous problems of a purely domestic character further emphasizes the complexity of the situation:

1. The army now owns stocks of raw wool equivalent to a normal six months' consumption for civilian purposes.

2. Army contracts now in process of manufacture will practically all be completed by January, 1919, or at least by February 1. After that time the industry will be obliged to manufacture civilian products or stop operation.

3. The stocks of raw wool in civilian hands are very low and few mills will be able to start without purchases of army wools.

4. The domestic clip of the United States for 1919 will be coming into the market beginning with April 1, 1919, and together with the army wools on hand, probably would carry

the industry through the greater part of 1919 without further importations.

5. All of the wools in Australia and New Zealand are owned by the British Government, and it is generally believed that by the time the present clip is all in they will represent the equivalent of about a year's normal clip. Naturally the British Government is concerned with all questions having to do with wool consumption or wool prices in this country.

6. The army now has in Australia and New Zealand 325,000 bales of wool which it has contracted for at a very favorable price, but which it is under agreement not to sell for civilian use at less than the British civilian issue price.

7. The only open market for wools is in the River Plate, where wools are now selling at a price lower than that which the army paid for most of its stock and higher than the British civilian issue price.

8. This combination of conditions makes it almost imperative that some solution be found immediately for the problem of saving the domestic wool producers on the one hand, and the manufacturing and distributing industries on the other, from the losses which would be involved in a sudden readjustment of wool prices from a high to a low level.

9. Labor conditions in this country may become serious, the two most conspicuous factors being the necessity for guaranteeing uninterrupted employment and the avoidance of any great reduction in the accepted standards of wages.

10. Costs of production other than labor are still on a war level and probably cannot be brought down to a peace basis promptly.

11. Conspicuous over the entire situation is the possibility of increased competition in fabrics imported from Europe and particularly from Great Britain.

PROGRAM.

This enumeration of the prevailing conditions, and some of the facts which led up to them, gives rise to the following suggestions for a program of undertakings, the working out of part, or all, of which, is necessary to insure the effective

operation for these industries for the immediate future. These suggestions are put forth with a two-fold purpose. First is that they may serve as a basis for discussion, and second that they may suggest possibilities for a subdivision of the problems for intensive work by special committees.

Among the tasks calling for prompt attack may be enumerated the following:

1. Keep the mills going. Minimize the break between Government market and private market conditions.

2. Distribute as equitably as possible the losses due to the drop from a high to a lower price level for raw materials and products.

3. Restore the operation of private competition.

4. Consider immediately how efforts of the Federal Government with respect to labor can best be supplemented. This covers such activities as the reabsorption and readjustment of employees, and the discovery, or development of a satisfactory basis for settlement of the inevitable and complex wage discussion.

5. Safeguard investments while, at the same time, preventing conditions favoring abnormal profits.

6. Examine the needs of and develop a program for wool growing and manufacturing as a national resource in peace and war. This involves a detailed consideration of producing costs and efficiency and of the tariff or other protective measures.

7. Develop a program for correction of abuses in various branches of industry and trade. These would include attacks on certain obvious evils such as design piracy, and bad cancellation practices, even though the development of a detailed code of competition may not be feasible.

8. Develop a policy establishing the place of American industry in the world's wool trade and industry. In this field lies the consideration of America's future position as an exporter of wool manufactures.

9. Develop a constructive program for the expansion of the American wool industries.

THE NECESSITY OF AN INCREASED WOOL SUPPLY.

An address by WILLIAM J. BATTISON, Assistant Secretary of the National Association of Wool Manufacturers, at the Second Patriotic Sheep Meeting Exhibition and Sale, at Albany, N.Y., November 12, 1918.

Mr. Chairman and Gentlemen:

THE subject assigned to me—"The Necessity of an Increased Wool Supply," appears to me to be so self-evident as hardly to call for a discussion; therefore, the few remarks I may make will be simply to call to your minds some former conditions, the present situation, and the actual state of affairs in the wool industry at the present time. One cannot discuss the wool question without at once finding himself considering the sheep situation, for any change in the latter is at once reflected in the supply of wool, and though wool is perhaps the most thought of product of the sheep, and while the sheep itself is often forgotten when wool is mentioned, yet, as without sheep wool would be impossible, it may be well to give a few minutes' thought to this valuable creature.

"Mary's little lamb" has become a classic, but long before this lamb was thought of, away back in the beginning of human history, we find that our earliest ancestors were set to cultivating a garden, to caring for fruits, vegetation, etc., but that overcome by curiosity they were not content to live in peace and comfort, obeying the rules laid down for their guidance; they must perforce investigate for themselves to learn if what they had been told was true. Now, I cannot say that their curiosity was not laudable; in fact if it were not for the investigating proclivities of the race we might well be in blissful ignorance of much that gratifies our senses and adds to our comfort. In their case, as often happens, the results of the inquiry were disastrous, and the *immediate* effect was their discovery of the need of clothing. The means at hand were not well adapted to the emergency—too fragile, perhaps—did not possess stability enough—and so they

shortly were provided with garments of skins, which seemed for a time at least to have been very satisfactory.

But what has all this to do with sheep, you ask? Why it is perfectly clear to me, in view of the fact that almost the next narrated incident tells of the sacrifice of a sheep; that sheepskins were the first substantial clothing of the race. As time elapsed, it is said that pieces of sheepskin with the wool on were used as a lining on the upper sides of rough wooden sandals, and that the warmth and moisture of the foot, and the pressure produced by walking, caused the wool on the piece of skin to become felted, and thus the fulling or felting process was suggested. Later on, without doubt, it was found that the wool fiber could be spun into yarn or thread and woven into cloth, which was so well adapted for warmth and protection from the elements that the cloth-making industry was devised, and by development and improvement through the ages has come down to us, when our mills, at this day, produce from the very coarsest of blankets, to fabrics the finest and of exquisite perfection—fabrics so strong, so thick and heavy, as to defy the most severe storm, and others so fine and light as to be almost invisible to the eye and imperceptible to the touch. A single pound of wool can be spun so fine as to reach enormous lengths. A 60's worsted, for instance, or a 21 run woolen yarn, measures 33,600 yards, or over 19 miles to the pound.

But as our cousins, the French, say, "I am getting away from my moutons," in other words, from my sheep. As has been suggested, the sheep has been with us from the beginning, and probably will be to the end. From the day when Laban of old undertook to take advantage of his son-in-law, Jacob, and found the young man to be more than a match for him, until now, the breeder of the innocent, harmless sheep has been amply able to take care of his interests, and without doubt if he can be convinced that in largely increased flocks lies his road to success, it will not be long before the hills and farms of our Eastern States will see greatly enlarged flocks. How we shall accomplish this is not for me to say. My purpose is to direct attention to the possibilities of the industry, and to the imperative necessity for our welfare as

a nation for the development of our sheep flocks. The sheep furnishes its owner with two very important sources of revenue, meat and wool—to say nothing of by-products of value, but not so important. I do not know that it can be said of the sheep, as is said of the pig, that all its products are saved except its “squeal,” but I do know that very little goes to waste.

Until recent years, in this country at least, wool has been looked upon as its product of chief value, but of late the growing scarcity of other meat products has directed attention to the value of sheep meat, that is, mutton and lamb, with the result of a large and growing market for this food; in fact it is even now difficult to get enough to supply the demand. So much for sheep as sheep.

The question of the wool supply hinges, as has been said, upon the number of sheep. According to the latest estimate, the wool product of the world is in the neighborhood of 2,800,000,000 pounds, while the total population is estimated at about 1,690,000,000. The relation between the two allows only 1.7 pounds of wool in the greasy condition for every man, woman, and child, and when this supply is reduced to the scoured state only about three-quarters of one pound is available. Fortunately, all the world does not use wool clothing, or we should be sadly deficient—even in ordinary times it would be difficult to find wool enough to go around, were it not for the use of reclaimed wool and other substitutes for new wool. Such is the condition of the world at large. How is it here at home?

The United States Census in the four latest reports gives the wool in condition purchased, consumed in the American mills, exclusive of about 9,000,000 pounds used in the Hosiery and Knit Goods manufacture, as follows:

In 1899.....	394,393,523 pounds.
1904.....	483,526,095 “
1909.....	552,503,710 “
1914.....	502,857,333 “

But, as much of this was purchased in the scoured state, these figures do not show the actual quantity of wool in its greasy

state, as it comes from the sheep's back. The wool as reported by the Census Bureau was equal in its scoured condition to—

238,632,452 pounds in 1899.
282,194,618 " " 1904.
352,478,605 " " 1909.
307,705,932 " " 1914.

An estimate of the actual quantity of greasy wool represented by these figures would double these quantities, that is, a moderate allowance for loss in shrinkage between the grease and scoured condition of all wool used would be 50 per cent. Therefore, the quantity of wool required for the use of our mills in these Census years would be, in round numbers—

In 1899.....	477,200,000 pounds.
1904.....	564,400,000 "
1909.....	704,960,000 "
1914.....	615,400,000 "

This is what the mills required. Whence did they obtain it?

The wool production of the United States for these years was—

1899.....	272,191,330 pounds.
1904.....	287,450,000 "
1909.....	328,110,749 "
1914.....	290,192,000 "

The requirements for our mills in these Census years were, nearly 2,400,000,000 pounds of wool, and our domestic production for the same years, 1,200,000,000, or only one-half of our needs. The rest had to be obtained abroad. In other words, for every pound of wool raised in this country another pound had to be imported, and all the money required to pay for this immense quantity of imported wool had to be sent out of the country to pay for it, instead of being retained at home for the enrichment of our own people.

The United States has the capacity to raise all the wool its mills require, its climate is suitable, its territory is ample, the ability of its producers is unquestioned. The reputation of its breeders is world wide.

I have stated briefly the conditions as to our wool resources previous to the war. What is the condition today?

The United States Department of Agriculture reports the sheep and wool products for 1917 and 1918, as follows:

1917...	Sheep of all ages,	47,616,006.	Wool produced,	285,573,000 pounds.
1918...	" " " "	48,900,000.	" "	299,921,000 "

In the year 1917, 40,000,000 pounds of pulled wool and 42,000,000 pounds in 1918 have been added to the Department's report on fleece wool to obtain the total result.

How about consumption in these years? Unfortunately, no exact figures are obtainable at the present time. A recent investigation of the Census Bureau indicates that in the year 1917 our mills consumed over 744,000,000 pounds of wool in the grease. More recent figures obtained by the Department of Agriculture show that in the first nine months of the present year the consumption was over 600,000,000 pounds, or at the rate of 800,000,000 pounds per annum, and the much greater part of this was used for the Government in the production of military equipment for our army and navy. At the present time many mills are in danger of closing down from lack of wool. In view of these facts what place can there be for argument about the necessity of an increased wool supply? The United States is a great nation, greater and more powerful by far than its founders could have imagined in their wildest dreams. How pitiable it is that in times of peace we have to depend upon foreign nations for one-half our supply of wool for our people's need of clothing.

On the 30th of September, a year ago, American manufacturers and dealers reported as having on hand 650,000,000 pounds of wool on the grease basis. On June 30 of this year this amount had been reduced to 494,000,000 pounds, and on September 30 to 468,000,000 pounds. Thus in one year's time the available supply has been reduced by 182,000,000 pounds. If to the 468,000,000 pounds on hand September 30 last be added the production for next year, assuming it to be equal to that of recent years, say, 300,000,000 pounds, and the consumption be assumed to remain the same, we have in sight only enough wool to carry us through next September.

So that except for what we may be able to import to replace wools used in the meantime,*in less than a year from now every wool loft and storehouse will be swept clean. Using the utmost endeavor our wool growers cannot come anywhere near to supplying this deficiency, for it is the work of years materially to build up a flock because of the slaughter of lambs and sheep. We must, then, depend on foreign sources for supply and failing that, our mills will be compelled to cease their operations.

There is understood to be a large amount of wool on storage in Australia, but it is controlled by the British government, which has bought in addition all the wool produced both at home and in Australasia for one year after the close of the war. How much Great Britain will permit to come here no one can tell, but it is safe to assume that she will look out for the interests of her own mills first. Besides, the French and Belgian mills will be in the market for wool as soon as they can be reëstablished. Argentina seems to be the point to which we must look for the principal part of the supply needed to make good our own lack. Our Government has taken steps to secure as much as possible of these wools that are suitable for military purposes, but the outlook for the civilian trade, while the war continues, is not encouraging. All these considerations emphasize the wisdom, nay the necessity, of earnest effort being made to increase our home supply to a point where it shall be equal to our home demands, so that we may never again experience the humiliating condition of being so thoroughly dependent on outside assistance for necessary raw material for our forces and our people.

A feature in this case, which is deserving of attention, is the fact that although wool is wool, all wool is not adapted to every purpose for which wool is used. While attention is given to the general question of increasing our wool supply, this fact must not be lost sight of. The Government in its statistical statements of wool imports follows the former tariff division of wool into three classes, viz.: Class I, Clothing wools, which include those of merino blood immediate or remote; these are especially adapted for use in making carded wool goods, being of moderate length, and soft and pliable;

Class II, denominated Combing wools, consisting of wools of English blood and similar wools of long staple, bright and elastic, are especially adapted to the combing machine for the making of fabrics known as worsteds, although improvements in the combing machine have made possible the use for worsted purposes of many of the Class I wools, so that the distinctive names, "Clothing" and "Combing," as applied to these two classes, are rapidly becoming obsolete, and Class III, commonly called Carpet wools, which comprise the remaining wools of the world, and are adapted to the manufacture of carpets, low grade blankets, and similar goods.

The Carpet wools are grown upon sheep of coarse character, which yield only a small fleece. They are raised mostly in barbarous or semi-barbarous countries, and as the time and attention required for their production would bring much larger returns if devoted to the higher grades of sheep, it is not profitable to raise them here. The attention of our wool growers should be, as it has been in the past, devoted to the production of the better classes of sheep, for which there must always be a large demand both for mutton and for wool. For these purposes some sections of this country are better adapted than others, and each grower must determine for himself which variety of sheep is best suited for his locality, but he may be sure that whatever variety he may select he will find a ready market for his wares. In the Eastern section of the country, it appears that the mutton breeds are likely to prove the most profitable.

In the discussion of the increase of wool production, however, it must not be forgotten that although the farmer, the wool grower, is as patriotic as any other American citizen, he cannot be expected to spend his efforts in an industry, however necessary it may be to the general welfare, unless it brings him returns equal to what he can secure in other lines of industry requiring no greater effort or investment of capital.

Some way must be devised to accomplish this end. Government encouragement has been given in the last two years to other "essential" industries—why should it not be extended for a time at least to this, one of the most important indus-

tries of the country? No effort has been spared to encourage the production of cotton—why should not similar attention be given to wool? On the contrary, however, it is stated, on what seems to be good authority, that our Government officials have recently placed immense orders for uniforms and for uniform cloths in England, which our mills could readily supply. The millions of pounds of wool in sight here might well be consumed in this service, and if an insistent demand were made for its replacement from the large stores in Australia and elsewhere, doubtless it would be forthcoming, and our people, who are supplying the sinews of war, would have so much added ability to meet the requirements of the Government.

The wools of the world are produced mainly in Australasia, South America, Africa, and our own country. Argentina and Uruguay together furnish about 398,000,000 pounds; British Africa, 158,000,000; Australasia, 742,000,000; the United Kingdom about 121,000,000, and Russia in Europe and Asia, in ordinary times, about 380,000,000. Today, except for the less than 300,000,000 pounds of our home production, we are dependent entirely on other countries, and equally so for shipping facilities to transport their wool to our shores. Imagine, if you can, our deplorable condition, during the recent years of war, had these foreign nations been hostile instead of friendly. We could not have put our armies in the field—our navy upon the seas. We should have been largely at the mercy of our foes, so far as this prime necessity for war is concerned.

I am not arguing for the wool grower, nor for the wool manufacturer. I am speaking on behalf of the whole American people, of whom we are a part. We need wool, and more and more wool. Our present supply is less than sufficient for half our needs. You will notice I have said nothing about the large quantity of wool which is imported in the shape of fabrics or in clothing, but only of the raw wool required for use in our home mills. For many years past the flocks have been decreasing and the home-grown wool supply diminishing; at the same time our population increases yearly and the difference between supply and demand grows greater.

Conditions in this country are much the same as abroad. The tendency to decreasing flocks is noticeable as civilization advances and the wild or vacant land is acquired by the agriculturalist and divided up into farms. It is clear that some method must be devised to counteract this tendency, or we shall go on from bad to worse, and with this end in view the work of such gatherings as this, and the efforts of the More Sheep-More Wool Association, and similar organizations, are greatly to be commended.

Since this paper was prepared the "truce" has been signed and the President tells us the war is over. But this happy consummation does not release us from the obligation of doing our best for our country's welfare. It is just as essential now as ever that pains should be taken to develop all our resources, so that we may be so far as it is possible *economically independent* and it is *just as necessary* that our wool supply should be increased to the point where we shall produce a sufficient supply to enable our mills to meet any emergency.

SPECIAL CENSUS OF THE WOOL MANUFACTURE.

CENSUS OF WAR COMMODITIES, JULY 20, 1918.

BECAUSE of the military requirements of the Government, the Census Bureau of the Department of Commerce was requested to make a special inquiry concerning the wool manufacturing industry of the United States.

The object of this investigation was to ascertain the machinery capacity of the country for wool manufacturing, and as accurately as possible, in the limited time allowed, the consumption of wool and the goods produced.

The report of fabrics was obtained at the specific request of the War Industries Boards, in lineal yards instead of in square yards, as is done in the regular Census reports. In consequence it is not possible to compare results in this particular with former reports.

The report which is produced herewith is nevertheless a valuable contribution to the statistics of the industry. Never before has so complete a statement been made of the actual quantity of wool, in its original state, consumed during a given period. Nor, except for the form in which quantities are given, has there ever been a more complete statement of the products from the wool consumed. The figures of production cover the three calendar years 1915, 1916, and 1917, a fact which adds greatly to their value.

Not only the greasy wool but also the equivalent quantity of scoured wool is given. These figures show more clearly than any previous statement the immense amount of wool required for the use of American mills, in ordinary times, and also the large additional demands made upon them because of the war. It has been rightly claimed that under normal conditions we do not produce more than half of the quantity of wool our people need, a statement which is confirmed by the 1915 figures, which show the consumption of the mills to have been over 615 millions of pounds, while the usual production of the

United States has been less than 300 millions, and for some years past, except in the last year or two, has been gradually diminishing.

The statement of machinery equipment is of great value, for it is the only authoritative record of the woolen and worsted machinery of the country since the Census report of 1914, and anticipates by many months the report of the 1919 Census, to be taken next year.

In spite of the drawbacks named, the report is very timely and useful.

As has been the case in all recent Census reports on the wool manufacture, the assistance of Mr. William J. Battison, Assistant Secretary and Statistician of the National Association of Wool Manufacturers, was secured for consultation before the tabulation of the returns.

DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS.

SAM. L. ROGERS, Director.

CENSUS OF WAR COMMODITIES, 1918.

WASHINGTON, D.C., October 1, 1918.

The following summary gives the leading statistics for wool machinery and production as reported to the Bureau of the Census on the questionnaire of date July 20, 1918.

EQUIPMENT AS OF JULY 1, 1918:

	Number.
<i>Scouring machines</i>	510
<i>Cards</i> , sets: Woolen, 6,296; Worsted, 2,278; Shoddy, 933.	
<i>Combs</i> : English (or Bradford) system, 1,912; French system, 435.	
<i>Spindles</i> : Woolen, 2,705,625; Worsted, English system, 1,641,770; French system, 699,404; Twisting, 737,784.	
<i>Looms</i> : (Broad, 50 inches or over, 62,121; Narrow, under 50 inches, 18,746)	80,867
(On Worsted goods, 42,448; Woolen or mixed goods, 34,137; Other goods, 4,282.)	
<i>Carpet and rug looms</i>	10,502
<i>Shoddy pickers</i>	1,057
<i>Garnet machines</i>	432
<i>Knitting machines</i> : (Spring-beard needle, 3,279; Latch needle, 7,314)	10,593

	1915.	1916.	1917.
CONSUMPTION.			
Wool in the grease, pounds	615,913,757	725,391,207	768,272,175
Scoured wool, equivalent, pounds	317,317,530	373,619,703	388,399,842
PRODUCTION.			
Product of—			
Shoddy pickers, pounds	157,684,150	148,658,808	171,748,296
Garnet machines, pounds	41,853,937	45,803,725	50,240,395
Yarns, pounds—			
From—			
Woolen spindles	342,382,073	358,220,518	393,546,822
Worsted spindles	171,014,932	196,222,669	193,692,597
Twisting spindles	93,045,627	100,584,543	97,012,911
Worsted or mixed worsted goods, linear yards .	220,140,558	271,141,884	271,592,072
Woolen or mixed goods, linear yards	207,975,155	234,580,366	257,001,862
Paper makers' felts (woven and felted) pounds .	6,721,931	7,705,159	9,609,523
Carpets and rugs, linear yards—			
Tapestry Brussels	19,995,826	22,880,697	17,298,797
Axminster	19,011,582	20,120,069	16,140,217
Tapestry velvet	8,414,420	9,481,698	7,859,556
Wilton	7,299,774	8,491,436	6,570,755
Broad ingrain	3,055,516	3,488,905	3,435,500
Ingrain	3,492,222	3,516,126	2,978,693
Body Brussels	3,102,287	2,812,502	1,299,769
All other	3,828,869	4,705,519	4,357,889
Hosiery and knit goods (chief products): *			
Cloth, pounds	9,366,640	10,891,649	11,550,829
Lining for rubber goods, pounds	2,757,427	2,934,058	3,052,985
Underwear, reported in pounds	5,130,483	5,849,064	7,366,646
“ “ “ dozens	2,373,112	2,441,201	2,531,724
Hosiery, dozens	4,585,229	3,792,220	3,979,221

* In addition to products of this character reported by establishments primarily engaged in the manufacture of woolen goods, 84 establishments engaged exclusively in the production of hosiery and knit goods, are included.

ACTIVE AND IDLE MACHINERY.

NOVEMBER 1 AND DECEMBER 2, 1918.

Reports Made Under Government Direction.

IN the October number of the Bulletin it was stated that the inquiry respecting the active and idle machinery of the country, which the National Association of Wool Manufacturers instituted several years ago, beginning first with a quarterly report developed later into one every month, because of the interest shown by manufacturers and others in this statement, had been surrendered, at the request of the Department of Agriculture, to the Bureau of Markets of that Department and would thereafter be continued by the Bureau.

The first two reports under the new arrangement are presented herewith.

The returns, which were entirely voluntary, as made to the Association, are now made under the official demand of the Federal Government and should, consequently, be more in number and more complete in detail than under the earlier arrangement.

The percentages of active and idle machinery do not vary very greatly from the last previous report, except in the case of carpets and combs and worsted spindles; of the former the Association was never able to obtain so full reports as were supplied by other branches of the industry.

In respect to the two last attention is directed to the United States Census report of August last, which is reproduced on page 96 of this Bulletin, wherein it appears that the Census office found 2,347 combs and 2,705,713 woolen and 2,341,174 worsted spindles.

The percentages of employment as found by the Bureau for the two months, and by the National Association for the

eight preceding months, are given for comparison. The data given by the Bureau of Markets are insufficient to allow a comparison with the percentages of machinery on government orders to total in operation on previous reports.

A statement of the percentages of employment calculated on the basis employed by the National Association is added.

SUMMARY OF REPORTS OF 945 MANUFACTURERS.

	Looms.			Sets of Cards.	Combs.	Spinning Spindles.	
	Wider than 50 inch Reed Space.	Under 50 inch Reed Space.	Carpets and Rugs.			Woolen.	Worsted.
In Operation . .	46,982	14,065	3,466	5,747	1,998	1,910,637	1,577,892
Idle	12,528	5,145	3,876	716	625	260,076	678,132
Total	59,510	19,210	7,342	6,463	2,623	2,170,713	2,256,024

Percentage of Idle Machinery to Total Reported.

	21.1	26.8	52.8	11.1	23.8	11.9	30.1
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Number of Machines in Operation.

Single shift . .	44,724	13,919	3,413	4,980	1,642	1,626,205	1,489,852
Double shift . .	2,258	146	53	767	356	284,432	88,040

Percentage on Government Orders to Total in Operation.

Single shift . .	57.5	17.5	16.6	52.7	52.4	53.1	59.
Double shift . .	3.7	.6	1.4	10.3	15.8	10.8	5.5

Schedules were sent to 1215 Wool Textile manufacturing concerns. In addition to the reports tabulated above, 130 concerns replied stating that their equipment consisted of machinery not listed on the schedule, and reports had not been received from 140 concerns at the time the compilation was completed.

SUMMARY OF REPORTS OF 895 MANUFACTURERS AS OF DECEMBER.

	Looms.			Sets of Cards.	Combs.	Spinning Spindles.	
	Wider than 50 inch Reed Space.	Under 50 inch Reed Space.	Carpets and Rugs.			Woolen.	Worsted.
In Operation . .	45,905	14,605	2,601	5,495	1,869	1,749,446	1,646,041
Idle	13,304	4,846	3,587	881	406	335,073	620,698
Total	59,209	19,451	6,188	6,376	2,275	2,084,519	2,266,739

Percentage of Idle Machinery to Total Reported.

Dec. 2, 1918 . . .	22.5	24.9	58.	13.8	17.8	16.1	27.4
Nov. 1, 1918 . . .	21.1	26.8	52.8	11.1	23.8	11.9	30.1

Number of Machines in Operation.

Dec. 2, 1918:							
Single shift,	44,528	14,603	2,558	4,976	1,546	1,588,242	1,564,781
Double shift,	1,377	2	43	519	323	161,204	81,260
Nov. 1, 1918:							
Single shift,	44,724	13,919	3,413	4,980	1,642	1,626,205	1,489,852
Double shift,	2,258	146	53	767	356	284,432	88,040

Percentage on Government Orders to Total in Operation.

Dec. 2, 1918:							
Single shift,	55.4	17.9	12.7	48.8	24.8	46.5	44.6
Double shift,	2.3	. . . . .	1.5	5.2	6.7	4.3	2.7
Nov. 1, 1918:							
Single shift,	57.5	17.5	16.6	52.7	52.4	53.1	59.
Double shift,	3.7	.6	1.4	10.3	15.8	10.8	5.5

Schedules were sent to 1058 Wool Textile manufacturing concerns. In addition to the reports tabulated above, 41 concerns replied stating that their equipment consisted of machinery not listed on the schedule, and reports had not been received from 122 concerns at the time the compilation was completed.

Percentage of Idle Machinery to Total Reported. Ten months to December 2, 1918.

Dec. 2, 1918* . .	22.5	24.9	58.	13.8	17.8	16.1	27.4
Nov. 1, " " . .	21.1	26.8	52.8	11.1	23.8	11.9	30.1
Oct. 1, " " . .	18.3	24.3	40.	9.3	12.5	8.8	18.8
Sept. 2, " " . .	13.8	15.1	36.8	7.	13.2	8.3	20.2
Aug. 1, " " . .	12.2	14.3	34.	6.	10.2	6.6	15.3
July 1, " " . .	10.4	10.2	30.2	5.9	10.5	6.5	13.2
June 1, " " . .	8.6	11.9	33.2	5.5	15.	7.	14.
May 1, " " . .	7.9	8.3	31.	5.3	8.6	5.4	12.7
April 1, " " . .	7.1	8.5	34.4	4.2	8.8	5.	12.5
March 1, " " . .	8.2	8.	31.	4.6	8.3	5.5	12.7

The percentages of the Bureau of Markets are not strictly comparable with those of the National Association of Wool Manufacturers because of the difference in method of gathering and tabulating the statistics.

WOOL STOCKS AND CONSUMPTION.

THE reports of the Department of Agriculture of the stocks of wool held by dealers and manufacturers are continued from our October Bulletin, which contained the report for the end of the quarter closing with June 30, 1918. The report for September 30 is given herewith :

WOOL STOCKS, SEPTEMBER 30, 1918.

As Reported by 308 Dealers and 597 Manufacturers.	Held by		Total.	Estimated Equivalent Grease Wool.
	Dealers.	Manufacturers.		
Grease Wool:	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
Domestic	156,348,125	31,795,351	188,143,476	
Foreign	63,310,892	70,104,425	133,425,317	
Total	219,659,017	101,899,776	321,568,793	321,568,793
Scoured Wool:				
Domestic	3,250,475	6,005,036	9,255,511	
Foreign	9,675,894	10,231,282	19,907,176	
Total	12,926,369	16,236,318	29,162,687	61,395,130
Pulled Wool:				
Domestic	6,521,639	5,036,472	11,558,111	
Foreign	4,179,232	3,413,145	7,592,377	
Total	10,700,871	8,449,617	19,150,488	19,150,488
Tops	346,751	12,288,670	12,635,421	27,056,576
Noils	3,655,375	12,467,496	16,122,871	34,524,345
Total grease equivalent				463,685,332

The following statement gives the pounds of wool in the grease, pulled, scoured wool, tops, and noils, all reduced to the scoured equivalent of the several quantities reported by the Department as the stocks held by dealers and manufacturers at the dates named.

Stocks of wool on hand held by dealers and manufacturers reduced to the grease basis :

June	30, 1917.....	566,249,298 pounds.
September	30, “	621,125,402 “
December	31, “	544,977,318 “
March	31, 1918.....	427,119,677 “
June	30, “	494,683,960 “
September	30, “	463,685,332 “

WOOL CONSUMPTION BY MONTHS.

The reports of the Department of Agriculture of wool consumed monthly by the mills of the United States, which were reproduced for the first five months of the year 1918 in the July Bulletin, and for the following three months in the October number, making eight months, are continued in the present number, which contains the reports for September, October, and November. They show the consumption of wool in the mills sending these reports to have equalled 708,068,373 pounds in the grease in the eleven months. The consumption of wool for the year in American mills will exceed 750,000,000 greasy pounds.

SEPTEMBER.

Schedules sent to 546 establishments.

6 replied too late for tabulation, having 31 sets of cards and 5 combs ;

5 reported as using only tops, yarns, and wastes ;

41 reported as using no wool ;

494 reported wool used as follows :

In Grease.

In grease.....	35,896,421 pounds	=	35,896,421 pounds.
Scoured.....	10,143,136 “	=	20,870,650 “
Pulled	1,608,856 “	=	1,608,856 “
Total	47,648,413 “	=	58,375,927 “

104 NATIONAL ASSOCIATION OF WOOL MANUFACTURERS.

OCTOBER.

Schedules sent to 544 establishments.

3 having 23 sets of cards and 9 combs reported too late for tabulation ;

2 reported as using only tops, yarns, and wastes ;

55 reported as using no wool ;

484 reported wool used as follows :

In Grease.

In grease.....	36,165,727 pounds	=	36,165,727 pounds.
Scoured.....	10,817,372 "	=	22,258,255 "
Pulled	1,709,410 "	=	1,709,410 "
Total	48,692,409 "	=	60,133,392 "

NOVEMBER.

Schedules sent to 560 establishments.

5 having 35 sets of cards and 10 combs reported too late for tabulation ;

3 reported as using only tops, yarns, and wastes ;

77 reported as using no wool ;

475 reported wool used as follows :

In Grease.

In grease.....	28,283,416 pounds	=	28,283,416 pounds.
Scoured.....	8,366,464 "	=	17,214,946 "
Pulled	1,632,843 "	=	1,632,843 "
Total	38,282,723 "	=	47,131,205 "

Obituary.

FRANK GUTMANN.

MR. FRANK GUTMANN, the veteran agent of the Worumbo Manufacturing Company, whose death brought sadness in the recent holiday season to a wide circle of friends, was the oldest of active American wool manufacturers, an able, high-minded man whose career won honor for himself and for the famous New England mill with which for more than half a century he had been associated.

Mr. Gutmann had lived for eighty-six years—having been born November 13, 1832, in Heyrode, a little town of Saxony, where his father was a textile manufacturer. The son was attracted by America and came to this country at the age of nineteen, after having gained an education in the public schools and the technical schools of Saxony. After a short stay here Mr. Gutmann returned to Germany and remained there for four years, studying the technique of manufacturing and gaining practical experience. Then at the age of twenty-three he returned to the United States, with the purpose of making it his home here and identifying himself completely with the land of his adoption. It happened that Mr. Gutmann was in Richmond, Va., when Fort Sumter was attacked in 1861. A strong Union sympathizer, he came instantly to the North and entered the New England wool manufacture as superintendent of a mill in Dighton, Mass.

The well-remembered brothers Oliver and Galen C. Moses of Bath, Maine, at this time were organizing a woolen mill at Lisbon Falls for the production of heavy woolen fabrics. Mr. Gutmann joined them in 1865 as agent of the Worumbo Company. It is an important part of the history of the American woolen industry—the steady advance of the Worumbo Company and the development of a famous business. Mr. Gutmann within his active career saw the mill increase from a 10 set to a 25 set establishment. Though Mr. Gutmann had a thorough mastery of his profession, he never ceased to be a student. He was an extraordinarily quick observer, and he kept in close touch with the development of his art not only in America but in Europe. A very able combination of efficiency and enterprise in the Moses family and in Mr. Gutmann readily accounts for the enviable fame achieved by the Worumbo fabrics.

Mr. Gutmann throughout his life was deeply attached to America. It was a great sorrow to him when his native land was arrayed in war against this country. He was a liberal giver to the national undertakings and by voice and example in every possible way he sustained the American cause. Mr. Gutmann was a lover of music, and his beautiful home in Lewiston was the center of a gracious and delightful social life. Born in the Roman Catholic faith he attended for some years the Pine Street Congregational church in Lewiston, but finally returned to the church of his fathers. He died respected and honored as few men are by their home community.

Mr. Gutmann's wife was Miss Mary Usher of Dighton, to whom he was married in 1866. Mrs. Gutmann died a short time before the fiftieth anniversary of their marriage. Mr. Gutmann is survived by a son, Mr. Walter U. Gutmann, assistant agent of the Worumbo Mills, and by a daughter, Mrs. Gertrude Gutmann Hill, wife of William C. Hill, a well-known educator of Springfield, Mass.

PHILIP F. AMIDON.

MR. PHILIP F. AMIDON, proprietor of the Hinsdale Woolen Company in Hinsdale, N.H., and formerly proprietor of what is now known as the Souhegan Woolen Company of Wilton, N.H., died in Hinsdale, November 9, 1918, in his sixty-seventh year. Mr. Amidon was the son of a well-known New England manufacturer, Mr. Charles J. Amidon, and had been all his life a resident of either Hinsdale or Wilton. He was educated in the schools of Hinsdale and in the Miles Military School at Brattleboro, Vt. When his schooling was completed he entered the business of C. J. Amidon & Son, every detail of which he mastered. For some years his brother, Mr. William O. Amidon, was associated with him as a partner. The Amidon family and their mills were well known and highly regarded in the woolen industry of New England. Mr. Philip F. Amidon was a member of the New Hampshire Legislature in 1899 and 1900. He was a member of the Masonic Order, thirty-second degree, a director of the Vermont National Bank at Brattleboro, and a member of the Home Market Club. Mr. Amidon leaves a wife.

Editorial and Industrial Miscellany.

A WAR SERVICE CONVENTION.

THE CHAMBER OF COMMERCE ASSEMBLAGE AT ATLANTIC CITY — STATEMENT FOR THE WOOL MANUFACTURING INDUSTRY.

By invitation of the Chamber of Commerce of the United States, under whose auspices the present War Service Committees of the various great national industries were established, members of these committees met in a great convention at Atlantic City, New Jersey, on December 2-6, 1918. This was a gathering of the War Service Committees, not a regular meeting of the Chamber of Commerce itself. It was stated that two hundred or more of the various War Service Committees were represented, many of them by their entire membership. The audiences at the auditorium, where the general meetings were held, numbered three or four thousand.

Mr. Harry A. Wheeler of Chicago, president of the Chamber of Commerce, presided and delivered an address notable for its clearness and breadth of vision of the problems involved in the great task of readjustment from war business to peace business. Another important address was that of Mr. Charles M. Schwab, the head of the Bethlehem Steel Corporation and the retiring director general of the Emergency Fleet Corporation, who has proved the man of the hour in the war-reconstruction of our merchant marine. Other speakers before the general assemblage were Secretary William C. Redfield of the Department of Commerce in Washington, and Mr. John D. Rockefeller, Jr. A paper prepared by Mr. James A. Farrell, the president of the United States Steel Corporation, was read in his absence.

An elaborate plan had been drawn up for meetings of separate War Service Committees, Related Groups and Major Groups to prepare resolutions and recommendations with regard to the work of industrial reconstruction for the consideration of the Clearance Committee or general Committee on Resolutions.

Related Group No. 17, wool and wool products, made up of the War Service Committees of the wool manufacturing industries, met on Wednesday evening, December 4, with Mr. F. J. Harwood, President and General Manager of the Appleton Woolen Mills, Appleton,

Wisconsin, as chairman, and Mr. V. E. Carroll of the *Textile World Journal*, New York, acting as secretary. There were represented at this meeting not only the wool manufacturers in general but the clothing manufacturers, the retail clothing dealers, the fur and wool hat manufacturers, felt shoe manufacturers, wool fiber manufacturers and sweater and other knit goods manufacturers. Mr. Winthrop L. Marvin of Boston, secretary and treasurer of the National Association of Wool Manufacturers, was the chosen speaker for the evening. In his address he reviewed the work of the War Service Committee of the Wool Manufacturing Industry as follows:

Appointed in the last days of December, 1917, the War Service Committee of the Wool Manufacturing Industry has completed nearly a year of active service for the government. This committee, of which Mr. Frederic S. Clark, President of the National Association of Wool Manufacturers, is the chairman, succeeded an earlier Joint Committee of Wool Manufacturers organized in March, 1917—before the United States entered the great war—for the purpose of co-operating with the Council of National Defense which had recently been formed in Washington. This earlier committee acted in an advisory capacity in the revision of specifications for woollen uniform fabrics for the use of both branches of the national service, and it performed a very important work in arousing the almost one thousand woollen mills throughout the United States to the need which the great war brought of devoting their best energies to the immediate production of the vast quantities of woollen cloths and blankets so suddenly demanded by our government.

The original chairman of this Joint Committee, which was chosen by the Executive Committees of the National Association of Wool Manufacturers and the American Association of Woollen and Worsted Manufacturers, was Colonel John P. Wood, of Philadelphia, then President of the National Association—who was both a practical manufacturer and an officer of many years of service in the National Guard. When Colonel Wood, who had served on the Mexican border, was recalled into the Federal service with his regiment, the First Pennsylvania Cavalry, he was followed as chairman of the Joint Committee by Mr. Nathaniel Stevens, President of M. T. Stevens & Sons Company of Massachusetts. This Joint Committee, having virtually completed its task of mobilizing the American wool manufacture for war purposes, resigned with all similar committees of the Council of National Defense, in December, 1917.

Then, in pursuance of the comprehensive plans of the Chamber of Commerce of the United States, and in response to a request from Washington, the National and the American Associations named the War Service Committee of the Wool Manufacturing Industry, not to be a part of the official machinery at the Capital but to "stand in a position of authority in all matters concerning the war and the government requirements." The original personnel of the new War Service Committee was: On behalf of the National

Association, Mr. Frederic S. Clark of North Billerica, Mass., President of the Talbot Mills, chairman; Mr. Franklin W. Hobbs of Boston, President of the Arlington Mills; Mr. George H. Hodgson of Cleveland, Vice-President and General Manager of the Cleveland Worsted Mills Company; Mr. Nathaniel Stevens, President of M. T. Stevens & Sons Company, North Andover, Mass.; and Mr. William M. Wood of Boston, President of the American Woolen Company; on behalf of the American Association, Mr. Herbert E. Peabody of New York, Selling Agent of the Shelbourne Mills, vice-chairman and secretary; Mr. Robert T. Francis of New York, Selling Agent of the Pontoosuc Woolen Manufacturing Company; Mr. J. P. Stevens of New York, of J. P. Stevens & Company; Mr. A. L. Gifford of New York, of the Worumbo Company, and Mr. George B. Sanford of New York, of Sanford & Russell. Subsequently Mr. Gifford retired to take up other important duties for the government, and he was succeeded on the committee by Mr. Charles H. Wilson of Pittsfield, Mass., of James & E. H. Wilson.

Mr. Peabody was designated as the representative of the committee in Washington, and Mr. J. J. Nevins, Secretary of the American Association of Woolen and Worsted Manufacturers, and Mr. Winthrop L. Marvin, Secretary of the National Association of Wool Manufacturers, were named as Assistant Secretaries. But in June, 1918, Mr. Peabody resigned as Secretary of the War Service Committee and as a member of the committee, to enter the government service as Chief of the Woolens Section of the War Industries Board, in association with Mr. John W. Scott, of Carson, Pirie, Scott & Company of Chicago, who had become the director of the Textile Division of the War Industries Board. To succeed Mr. Peabody as Secretary and Washington representative, the War Service Committee chose Mr. George B. Sanford, and to succeed Mr. Peabody in membership on the committee the American Association of Woolen and Worsted Manufacturers designated Mr. Manton B. Metcalf, of Metcalf Brothers & Company, New York, who had followed Mr. Peabody as President of the American Association. This War Service Committee has been fully representative of the American wool manufacturing industry, and it has fulfilled its responsible duties to the entire acceptance of the manufacturers and the government. It has held many and constant meetings, and has kept in the closest possible touch with the War Industries Board and the War and Navy Departments.

Few, indeed, are the large American industries which have been so heavily mobilized for war purposes as the American wool manufacture. On the first of October last, about 60 per cent of its active machinery throughout the country was directly engaged upon work for the army, the navy and the Red Cross. In order to stabilize prices and to assure an adequate supply of materials, all the domestic and imported raw wool stocks of the country had step by step been taken over by the government, to be issued as required by the manufacturers. For several months these wool stocks had been reserved for strictly national uses and were not available for the production of any but military or naval fabrics.

It inevitably follows, therefore, that the American wool manufacture is confronted by very large and imperative problems in the transition period from war to peace. When the armistice in Europe was signed on November 11 last, the War Department had called for and received bids for great quantities of the chief uniform fabrics. It was immediately announced by the Department that no contracts whatever would be awarded on the basis of these bids, and later it was made known that the army had heavy surpluses of manufactured uniforms and uncut cloths on hand, and that while there would be no arbitrary cancellations of contracts not completed, yet the mills would be expected to arrange for the cessation of all government work as soon as mutually satisfactory agreements to that end could be negotiated.

This, therefore, is the present somewhat anxious condition of the industry. The government holds considerable stores of raw wool, and is receiving accessions of substantial imports. All these wools, acquired for army and navy purposes, will be, and in fact are being, released for general civilian use, at prices substantially higher than the rates at which the British government is making similar wools available for British manufacturers. Because of the proved inadequacy of the present tariff duty of 35 per cent ad valorem on imported cloths and dress goods, a severe competition from abroad is apprehended as soon as the mills of Europe are enabled to turn their attention to the great and inviting market of America.

When the Simmons-Underwood tariff law of 1913, now in force, placed raw wool on the free list, it reduced the duties on woollen fabrics to a point which led to a threefold or fourfold increase in the importations of foreign cloths and dress goods, in the seven months which intervened between the taking effect of these new goods duties, on January 1, 1914, and the breaking out of the war in Europe. There was a conclusive demonstration that the woollen tariff rates had been recklessly and excessively reduced, and that grave disaster was certain to overwhelm the wool manufacturing industry of this country. Before these flooding imports were checked by the war and its consequences, fully one-third of the machinery of American woollen mills was idle, and approximately one-third of their employees were without work and without means of livelihood.

The dark shadow of that experience hangs over the industry today. Before the war, in 1913, the prevalent rates of wages in American woollen mills were double, or somewhat more than double, the wages paid for the same kind and amount of work in the woollen mills of the United Kingdom and the Continent. Now the difference is even greater, for while the advance in wages in American mills since the war began has been 100 per cent or more than that, the advance in wages in British mills has been in no case more than 82 per cent—so that the difference in wage costs between this side and the other side of the Atlantic Ocean is substantially wider than it has ever been before. This statement is confirmed by actual wage records which have just been secured from the principal wool manufacturing districts of Great Britain.

Moreover, it must be borne in mind that the British wage increase is in the form of certain percentages added to the ante-war wages, in the form of a separate premium which it must be assumed that peace will terminate. In American woolen mills no such temporary bonus system was adopted, or was possible.

Another problem of reconstruction for the American wool manufacture is the maintenance of a large, dependable supply of raw wool. Before the war, the industry was relying more and more upon importations. Our native wool product has not increased with the growth of population and of manufacturing. A quarter of a century ago, in 1893, the total American production of raw wool was 348,000,000 pounds. From that point it fell, under the Gorman-Wilson free wool tariff, to 259,000,000 pounds in 1897. Under the Dingley tariff of that year, the American wool production gradually increased to another maximum of 328,000,000 pounds in 1909. But it did not hold this gain, and in 1917 had fallen to 285,000,000 pounds. Our annual consumption of raw wool in American manufacturing before the war was not far from 600,000,000 pounds in a year of activity—so that more than one-half of our entire wool supply represented importations from distant countries, chiefly the east coast of South America, Australasia and South Africa.

Early in the war, the British government imposed an embargo on the export of native and Colonial wools to foreign countries—the motive of Great Britain being the thoroughly natural desire to keep this indispensable material from her enemies and to assure herself of a sufficient supply for the clothing of her own and Allied forces. At the request of our own government the British embargo was very soon relaxed to allow the release of a certain amount of Colonial wools for the use of American manufacturing, and we have drawn more heavily than before upon the stocks of Argentina and Uruguay—so that no actual wool famine has resulted. Recent difficulties attending our wool supply have been difficulties of securing adequate shipping space, and these are likely to continue in an acute form for many months, until the product of our shipyards has greatly increased and until one-half of the American expeditionary force has been brought back from Europe.

The war has re-emphasized the value of an increased American production of the essential materials of manufacturing. No one can predict when Great Britain's control of her valuable asset in the huge Australasian wool clip will be finally abandoned. It may be that this control will be continued in some form through years of peace. In any event, experience has demonstrated that the only secure supply of wool in time of war is the wool which a country grows within its own immediate jurisdiction. Every consideration of national prudence points to the need of enlarging our own wool stocks, so that at least two-thirds of the amount of our annual consumption is produced within the United States.

Another problem of reconstruction for the wool manufacture has to do with an adequate supply of dependable dyestuffs of American production. Here again the war has demonstrated the exceeding

unsoundness of relying for such indispensable materials upon uncertain sources abroad. In the earlier months of the conflict a joint arrangement was reached by the American, British, and German governments through which certain quantities of German dyestuffs were shipped to the United States in return for cargoes of raw cotton and raw wool forwarded to Germany. But when the British authorities, early in 1915, made raw cotton and wool contraband of war, the supplies of German dyestuffs, so necessary for the textile and other industries, were entirely cut off except for the small amounts subsequently received in the submarine Deutschland. Thus the United States was thrown back upon its own resources for the production of its own dyestuffs and colors, and very handsomely have American chemists and dyemakers responded.

For a long time, however, before their volume of production was large, the textile industries were very gravely embarrassed by the lack of dyes. Old-fashioned coloring methods were revived. Logwood and other substitutes were utilized for a season. But the American dye manufacture has now attained a strength which in the course of a few years should render our country independent. American wool manufacturers, as a rule, believe in sustaining this new American industry as vital to our economic independence. The special dyestuff section, rather grudgingly added to the revenue law of 1916, is unsatisfactory to American dyestuff manufacturers. It will have to be made more positive, particularly in regard to alizarin and indigo, before proper assurance can be had that the new American dye-making industry will not be overwhelmed after the war by the powerful dyestuff combinations of Europe. This is a matter about which the wool manufacturers of this country are exceedingly solicitous in the process of reconstruction.

At this present time the exact course which the government will take in the readjustment of pending contracts for military and naval fabrics with the wool manufacturers of the country has not yet been indicated. It is promised in a general way that no injustice will be done, that contracts very nearly filled will be completed, and that contracts which still have a considerable time to run will be compromised with the smallest possible loss to manufacturers compatible with the welfare of the government. But the working out of the details of the policies of the War Industries Board or of the War and Navy Departments will manifestly demand a high degree of tact and of mutual consideration. On the one hand the government, of course, cannot be expected to go on heaping up great quantities of army and navy fabrics beyond either immediate or prospective needs, for mere purposes of storage in warehouses. On the other hand, the manufacturers who have secured their supplies of wool and have based all their business calculations on fulfilling contracts to run for weeks or months cannot readily dispose for civilian uses of wool stock or yarns dyed in the characteristic olive drab. A re-dyeing is necessary if these materials are thrown back upon their hands.

Moreover, uncertainty as to future prices of raw wools since the signing of the armistice has been unsettling the entire woolen goods

and woolen clothing market, from the growers and sellers of wool to the merchants who dispose of the finished clothing to the retail customers. The whole woolen industry has been experiencing some exceedingly anxious weeks. It is agreed on all hands that certain losses must be faced and taken, and it is important that no disproportionate share of these inevitable losses should be imposed upon any one branch or element of the industry—for to cripple one branch is eventually to injure all alike. There have been conferences in Washington and in New York with officials of the War Industries Board and Quartermaster Department, and there must be other conferences before this present urgent problem of readjustment can be settled on a basis of sound business equity.

Meanwhile, however, there is the satisfaction of an honest, systematic effort to meet the expectations of the government and the needs of the army and navy in the greatest of all great wars. If there have been any shortcomings in the relations of the woolen industry to the government during the last eventful year and a half they have been shortcomings of accident and not of design. The manufacturers have recognized their prime obligation to the government, and realize that they are not yet released from their obligation. They desire and expect, as they have a perfect right to do, that the government which they have served should now deal as frankly and as generously as possible with them, that the whole elaborate machinery of government control and regulation which the war has made essential should now be eliminated step by step as quickly as this can be done, and that the entire industry be established at the earliest possible date on a thoroughgoing business basis, responsive, as before the war, to the inexorable and admirable laws of supply and demand.

Resolutions were adopted by Group 17 at Atlantic City recommending the adoption of an adequate protective tariff, and urging that finished goods and materials now in the hands of the government be released with due regard to the safeguarding of current business, and only after consultation with representatives of all branches of the industry concerned.

On Thursday, December 5, the woolen products War Service Committees met at the Olivet Presbyterian Church with the War Service Committees of the other textile industries—Mr. J. E. Rousmaniere of J. Spencer Turner Company, New York, acting as chairman, and Mr. C. H. Clark of Boston, of the *Textile World Journal*, acting as secretary. Among those who delivered addresses at the meeting of this Major Group No. 5 were Mr. James R. MacColl, treasurer of the Lorraine Manufacturing Company of Pawtucket, Rhode Island, and Professor Paul T. Cherington of Harvard University. This Major Group accepted protective tariff and other resolutions, and recommended them to the Clearance Com-

mittee of the Chamber of Commerce, on which committee the textile industry was represented by Mr. Charles Cheney of Cheney Brothers, New York. The final resolutions of the Chamber as reported by this Clearance Committee contained a strong statement in favor of the encouragement of new industries created by the war, but made no positive declaration on general tariff policies—much to the disappointment of the textile War Service Committees, all of which had recommended positive action along these lines, as, indeed, had most of the War Service Committees of the great manufacturing industries.

It is to be regretted that the Chamber of Commerce of the United States, though a large and important organization, is not yet nationally representative in character. Many of the great national productive industries of the war have a small representation in its membership. Yet it was the sense of those who attended the meeting that it was certain to be beneficial in its general effects, in bringing together so large a gathering of business men from all sections of the country. It was the outspoken wish of the convention that the present War Service Committees should continue to represent their industries in the active work of business reconstruction after the war.

A DECISIVE PROTECTION TRIUMPH.

THE CONGRESSIONAL ELECTIONS OF 1918, AND THEIR GUARANTEE OF OUR INDUSTRIAL FUTURE.

A RETURN to the American protective system is certainly foreshadowed by the results of the recent Congressional elections—those of November, 1918. As a result of those elections, an anti-protectionist majority of eight in the United States Senate and of four or five in the House of Representatives was completely overturned, the protectionist majority in the new Senate being at least two and approximately 50 in the new House of Representatives. To these results all sections of the country contributed, but the protectionist gains were relatively greatest in the industrial and agricultural Middle West. One most unfortunate feature of the elections was, however, the defeat of Hon. John W. Weeks, junior Senator from Massachusetts, a national leader of his party, a business man of broad experience, and a legislator invaluable to his State and country at the present time.

The very decisive general protectionist victory in the November elections is all the more significant because it was achieved in spite

of the earnest appeal of President Wilson for a new Congress dominated by men of his own political faith. Undoubtedly many hundred thousand voters who do not favor a tariff for revenue only supported the President in answer to this appeal, of so much potency in war time. Therefore, the actual size of the protectionist majority in Congress is by no means an accurate measure of the protectionist strength among the American people. If these elections had come after instead of before the signing of the armistice, the verdict would have been even more emphatic.

It is manifest that the country has grown weary of doctrinaire experiments in legislation, weary of leadership like that of Chairman Kitchin of the House of Representatives. There is still among our people a lively recollection of the actual consequences of the tariff for revenue only of 1913, during the brief months before its normal operations were suspended by the outbreak of the great war in Europe. Conspicuous stress was laid upon the tariff issue in the autumn campaign. People were asked to determine whether in view of the apparent approach of peace they wished to continue the Simmons-Underwood law or to abandon a policy of tariff for revenue only for a tariff for both revenue and protection. It is probable that prudent economic considerations counted for far more than all else combined to win the protectionist triumph—though this result was contributed to by the revelations of official incompetency in the handling of the aircraft situation and in the general administration of the all-important War Department.

History will record that the American nation was successful in its own part of winning the present victory because of the virility of its soldiers and sailors and the competency of the trained officers of the regular army and navy establishments—sustained as they were by the best equipped and most resourceful general manufacturing industries in the world. It was the high personal quality of the fighting men, plus the admirable training of their professional leaders, plus the unparalleled economic strength of America, which made the United States, though it came late into the conflict, the actually determining factor in that conflict. In America's part in the final triumph politicians as politicians had very little to do.

It was most unfortunate for the United States and its Allies that the war found our own National Administration so largely dominated by men who had long been intensely hostile to our great national productive industries. One of the great outstanding facts of our war experience is that we succeeded and made headway in war preparations only in so far as important administrative duties were relinquished by politicians to business men of experience and

competence—by such business men as Mr. Hurley and Mr. Donald of the Shipping Board, Mr. Schwab of the Emergency Fleet Corporation, and the gentlemen who wielded the real authority of the War Industries Board and the War Trade Board in Washington. Next after our officers and men of the fighting services it is these business men who are the real heroes of the war. The dominant politicians, as a rule, had merely first opposed and then bungled the work of preparedness.

It is most fortunate for the whole country that the election of a protectionist Congress means the election of a Congress disposed to listen with some consideration to American business men, not only on the tariff but on other important public issues. Great problems of the war are not to be settled by a mere signing of the armistice or the later formal conclusion of the terms of peace. Far more than any previous war has this unprecedented conflict changed many fundamental conditions, not only of the belligerent countries but of the entire world. President Wilson himself has quickly realized this circumstance. One of his first acts after his landing in Europe was to send for some of the able business men who during the war had been charged with the weightiest of our war-administrative activities. The President has discovered that he will need their help even more than that of professional diplomats. He has discovered what men of business could have foretold, that most of the urgent problems of after the war will be distinctively economic in their character.

In the matter of railroads, of shipping, and of tariff protection the American people have very positively indicated that they prefer to have a Congress which will listen with sympathy and understanding for the framing of our future policies to representative practical leaders of the trade and industry of our nation. The American people have put the plain mark of their disapproval upon haphazard experiments in government ownership and operation of business. It is of immense consequence to the welfare and happiness of our country in the immediate future that the manufacturers, the merchants, and the bankers of this country are going to be in a position to have something to say about any legislation that may be enacted by Congress after March 4, 1919. Most important of all is it that the haphazard sectional tariff law of 1913 now on our statute books has been condemned by the people for repeal at the earliest practicable moment.

It would be well for the country if this repeal could immediately be had, but, of course, that must wait for two years more, or until President Wilson's successor is elected, with a Congress practically

certain to be even more strongly protectionist than that chosen last November. But it is not too early to begin preparation for a carefully drawn tariff for revenue and protection by gathering all the information which can possibly be secured. What protectionists want and what the country wants is a new tariff, framed with the utmost care and deliberation in the light of all ascertainable facts, to give American labor fair play against foreign labor and to secure American control of American markets. These things the present tariff does not provide—it was not intended to provide them. It was framed by men who in their national platforms had constantly proclaimed that all tariff protection was iniquitous and unconstitutional.

HOURS OF WORK IN WOOLEN MILLS.

AN IMPORTANT STUDY OF THE EFFECT OF REDUCTIONS TO A BASIS OF 54 HOURS A WEEK.

AN important practical service is being rendered by the National Industrial Conference Board, not only for the manufacturing associations included in its membership but for trade and industry as a whole, through a series of reports which the Board has been preparing, based on an investigation of the hours of work problem in major industries. Third in this series is a report just published on "Hours of Work as Related to Output and Health of Workers in Wool Manufacture"—Research Report No. 12—December, 1918. Data upon which the report is founded have been assembled through inquiries addressed to members of the National Association of Wool Manufacturers and others—and in part by field investigation. Both employees and workers have been consulted and actual working conditions of operatives in many representative mills were observed and studied.

Altogether the present report covers 126 wool manufacturing establishments, employing in all 91,230 operatives, or nearly one-half of the total number of wool mill workers in the United States. Massachusetts and Pennsylvania, foremost in the wool manufacture of this country, furnished nearly one-half of the data of the investigation—but the inquiry covered other States as far East as Maine and as far West as Oregon. With so large a proportion of the total industry included, over so large a geographical area, the report made will be considered thoroughly comprehensive.

Of the employees in the 126 wool establishments from which data were gathered, 53 per cent were men, 41.5 per cent women, 2.6 per cent boys, and 2.9 per cent girls. These figures correspond very closely with the records of the United States Census of Manufactures for the entire wool manufacture of the United States. They are sufficient to show that "child labor" is almost a negligible factor in this particular textile industry.

Most of the wool manufacturing of the United States is now being conducted on a 54-hour weekly schedule. In 113 of the 126 establishments under consideration the work hours were from 54 to 56 per week—in 86 of these establishments exactly 54 hours. All but one of the total 126 establishments observed a weekly Saturday half-holiday—as, indeed, most of them have been doing for many years.

As a result of these careful investigations, the National Industrial Conference Board states that out of five establishments which had reduced their working hours from 58 to 56 a week, one reported that the output was actually increased and three others reported that it was maintained. Out of eight establishments in which the weekly hours of work were reduced from 56 to 55, six reported a decrease in production and two reported that their output was maintained. These establishments in the two classes, however, are too few in number to sustain any safe general deduction.

But the really significant part of the report is that presented in the case of the 54-hour group, representing 68 establishments and over 57,000 employees. Thirty of these establishments reported on a reduction of work hours from 56 to 54, 17 from 58 to 54, two from 60 to 54, one from 59 to 54, two from 57 to 54, and three from 55 to 54. Of the 68 only six establishments reported an increase of production in the shortened time, and only seven a maintenance of production, while 55 of the 68 reported a decreased production. The 13 establishments that maintained or increased production were most of them small concerns, representing altogether less than 7 per cent of the total number of workers. As the National Industrial Conference Board sums up the situation:

The results indicate that the 54-hour week has unquestionably placed a burden on the industry from a production standpoint. The fact that so many establishments report a decrease in output, makes it reasonably clear that the 54-hour week does not give maximum output. Nevertheless, the burden thus imposed is less than the comparison just made might suggest. Thus approximately one-third of the 55 establishments which reported that output was decreased stated that the decrease was less, proportionately, than the reduction in hours.

In a majority of the establishments rates of wages were increased when the hours of work were shortened. A summary comparison of the 54-hour group is presented as follows:

	Number Establish- ments.	Per Cent of Total Employees in Groups.
Establishments reporting output increased.....	6	2.6
Establishments reporting output maintained	7	4.1
Establishments reporting a decrease in output appreci- ably less than proportional to the reduction in hours,	17	20.8
Establishments reporting a decrease in output about proportional to the reduction in hours	26	50.6
Establishments reporting a decrease in output greater than proportional to the reduction in hours.....	5	6.6
Establishments reporting a decrease in output, but not indicating its amount.....	7	15.3
	<hr/> 68	<hr/> 100.0

To understand the full significance of these figures it is essential to note a further statement of the report, that "In general maintenance of output under a 54-hour schedule has occurred in the case of smaller and older mills, and practically none of the large modern mills on which the industry now chiefly depends has maintained production under such a weekly schedule. This obviously has an important bearing on judgment as to the economic justification of a 54-hour week. It means that in those establishments which, practically speaking, represent modern standards and methods of operation, a 54-hour schedule has almost invariably involved a loss in production. In some of these cases, however, this loss has been less, proportionally, than the reduction in hours." The report adds, however, that, "It should be recognized that where the decrease in output is very small the compensating savings in overhead expense, such as power, heat and lighting, and wear and tear of machinery, may prove at least a partial offset." And further, "To epitomize the experience it may fairly be concluded that the 54-hour schedule in the wool manufacturing industry has involved a net loss in output, but that, taking the industry as a whole, this loss has not resulted in a heavy burden upon production."

Similar inquiries have been made in an earlier report by the National Industrial Conference Board on the cotton manufacture. In that case only six out of 70 Northern cotton manufacturing establishments reported that the output was maintained when work hours were shortened to a 54 or 55-hour schedule, "and even in

these six cases there were many exceptional conditions which so qualified the results as to rob them of much significance."

The present report points out as a reason for the fact that results proved considerably better, from a production standpoint, in the wool manufacture than in the cotton manufacture, that "While wool manufacture, like cotton manufacture, is largely a machine industry, there is much more opportunity for the wool worker than for the cotton worker to influence production by his own effort. Substantial evidence of this is found in the fact that where a cotton weaver often tends sixteen or twenty looms, or even more, the wool weaver seldom tends more than two and almost never more than four. On the whole, moreover, the manufacture of wool requires more skill than does the manufacture of cotton."

Some of the studies of individual mill experiences under reduced working hours are very interesting. Thus a large worsted mill making a variety of fabrics had under a 56-hour schedule in 12 weeks of 1911 an average production in picks per loom of 3,989,976.9, and under a 54-hour schedule in 12 weeks of 1912 had an average production in picks per loom of 3,927,222.9—a perceptible, though not a large, reduction. A spinning mill working 57 hours a week in 1911 had a total output per week of 1,623,280 pounds and under a 54-hour schedule in 1914 a weekly output of 1,531,548 pounds.

It is very necessary in an investigation of this kind to consider the fact that in the wool manufacture most mills produce a variety of fabrics, and that the character of production differs greatly from year to year. Yarns differ in size and material. Variations in the run of the stock may also render output figures misleading, and factors that influence output directly or indirectly are, as a superintendent has well described them, "almost infinite." Any results of such an inquiry as this should be accepted with due knowledge of this circumstance.

In connection with this present report there was also a study of the health of wool mill workers. Out of 57 establishments reporting on health conditions, 50 stated that the shortening of work hours had had no definite effect. Four reported a decided improvement, while three said that the effect had been good. These better health conditions, however, were reported from mills which had been operating 58 hours a week. "With only a very few exceptions, establishments reducing from 56 to 54 hours a week reported no apparent change in health conditions under the shorter schedule."

No particular occupational diseases have been disclosed in studies of the wool manufacture in America. There are certain hazards

from wool dust, though these do not seem to be important. Anthrax is rare in the wool mills of this country—out of 132 deaths from this disease in 24 States comprising the registration area of the United States during the six years from 1910-1915, inclusive, only one of the victims was reported as having been engaged in wool manufacturing. Precautions against this contagion in the industry have apparently been effective. The report notes “a distinctly high death rate from tuberculosis and also from pneumonia,” which may be related in part to the high temperature and humidity characteristic of certain processes in the industry. Whether this high rate is due to the occupation itself or to such factors as race, inheritance, and personal habits is a problem that might well be separately determined.

This report of the National Industrial Conference Board is particularly timely in view of the reported demand from one of the textile unions for a further shortening of the work hours from 54 to 48 a week. The facts of the report make it practically certain that such a shortening would cause a substantial loss of production without any compensating advantage in health or comfort to the mill employees. It seems quite probable that the maximum production of the wool manufacture is attained by a working schedule of about 56 hours a week, just as practical mill managers have long contended—and that a progressive shortening of hours below that point inevitably brings a progressive lessening of output, to the direct and immediate injury of the industry and eventual loss to the workpeople themselves.

ANOTHER FLANNEL DECISION.

IMPORTERS' CASE AGAIN FAILS BEFORE THE BOARD OF GENERAL APPRAISERS.

EVER since the enactment of the Simmons-Underwood tariff of 1913, which made woolen fabrics described as flannels dutiable at 30 and 25 per cent as contrasted with a duty of 35 per cent on wool cloths and dress goods in general, there have been persistent efforts by importers and agents of foreign manufacturers to enter at our custom houses so-called flannel goods that were really general men's wear or dress goods, in order to secure the lower rate of duty. These efforts have been met and resisted by the Customs Bureau and other representatives of American interests who have introduced expert evidence to show the real significance of the word “flannels” in the uses of the trade.

On December 3, 1918, an important decision was rendered by the general appraisers of the port of New York in the matter of protest of R. Connor and others against the decision of the collectors at the port of New York, Boston, and Philadelphia. The decision was affirmed by the general appraisers, who, in their statement of the case, said that the case was really a consolidation of several cases brought into legal procedure provided by the local Customs Act at New York, Boston, and Philadelphia, and the issue involved was whether the merchandise in dispute was properly dutiable under paragraphs 288 and 290, Tariff Act of 1913, as wool cloth or wool dress goods at 35 per cent ad valorem as classified by the collector, or under paragraph 289 of the Tariff Act of 1913 as flannels, as claimed by the importers. The issue therein presented was described by the appraisers as one "not easy to determine." "This is a typical case where," they said, "the line of discrimination between fabrics and articles approaching near to each other in quality, or component materials, or commercial denominations, is often very nice and difficult, and sometimes exceedingly obscure."

In this consolidated case the importers claimed that under the custom of merchants in the trade selling the goods in question, as shown by testimony, a commercial designation of the items in dispute as flannels had been made out. The general appraisers in their decision declared that "Assuming for the sake of the argument only that the testimony taken in the case now on trial might be held to make out such definition, the record as a whole cannot be held to do so because the testimony of a number of witnesses in the incorporated case is flatly to the contrary. Therefore, we cannot say on the whole record that a definite, uniform and general definition has been made out. We hold, therefore, upon the evidence before us in these cases that no commercial definition has been established showing that the goods in dispute are flannels."

Further, the importers contended that irrespective of commercial designation or custom in handling the goods in question, the form and manner of the amendment of the flannel provision in the Act of 1909 by the corresponding provision in the Act of 1913, and the statements in debate in the United States Senate at the time when the form of the flannel provision in the Act of 1913 was finally decided on, confirmed contention that the language used in the Act of 1913 was descriptive of the class and character of the merchandise intended to be covered by the provision and included as flannels as the merchandise in dispute. But the general appraisers held that individual statements of the members of the legislative body in debate could not be considered as interpreting a

provision of the law as established by various decisions of the Supreme Court which were duly quoted.

The general appraisers added that "It is true that the Act of 1913 greatly extended the scope of the flannels provision and no longer limited it to flannels for underwear, with the result that we have classified under the Act of 1913 in our previous decisions varieties of flannels consisting of what we may call the outing variety used by both men and women. It is also undoubtedly true that it was not intended to include in the 1913 provision all dress goods of a light and fluffy character."

The decision of the general appraisers further said: "That this has left a line of demarcation not easy of solution in every case is admitted, wherefore we said in the case of Baruch, Wolff & Co., Abstract 40403 (31 Treas. Dec. 493):

The testimony shows that a flannel is a loosely woven fabric, usually of wool or chiefly of wool, of light weight, having a certain soft finish, the texture being practically the same as when it leaves the loom. The distinguishing characteristics between flannels and other woolen fabrics like cheviots and worsteds were pointed out by the witnesses as being shown by the method of manufacture, the material used, the soft texture and appearance when finished, and the processes which the cheviots and worsteds, etc., undergo after weaving, to which flannels are not subjected.

Yet it seems that those distinguishing characteristics and differences between goods that are flannels and goods that are not flannels are not apparent from an examination of a particular sample, except to an expert in the trade. It would seem, then, in general that no definite or fixed rule or test can be applied to determine whether or not a certain fabric is a flannel, but each case must depend on the particular testimony presented therein.

"Therefore, we are constrained to hold, following the principle laid down, and taking this record as a whole, including the samples themselves, the testimony of use, and the other testimony so far as it discloses the character of the goods, that this merchandise is not flannels within the meaning of paragraph 289 of the Act of 1913."

Judgment, therefore, was entered in favor of the government, overruling the protests in all respects, by General Appraisers Brown and Sullivan. General Appraiser McClelland filed a dissenting opinion.

One important moral of this extended controversy would seem to be that the word "flannel" or "flannels" should be completely stricken out of the tariff law in the next revision. A motive of those members of the legislative body seeking to establish a particularly low tariff rate on flannels seems to be a lingering belief

that flannels, instead of clothing, are underwear as they were to a very great extent two generations ago—the underwear of the masses of the people. But, as practical manufacturers and merchants know well, this is no longer true, the term flannels now being loosely applied on all occasions to almost any rather loosely woven fabric. Many so-called flannels are expensive fabrics designed for the use of persons of wealth and leisure. Many others less costly are of the nature of outing or holiday cloths. There would seem to be no present reason whatever, out of the process of manufacture of these fabrics or out of the uses to which they are put, to justify duties below the standard rate. The fact might be contended that the kinds of so-called flannels that are largely imported into the United States ought to be made dutiable at a higher rate than the bulk of cloths and dress goods.

Book Review.

YARN AND CLOTH MAKING.

A NEW volume of direct interest to the woollen industry is "Yarn and Cloth Making—An Economic Study," by Mary Lois Kissell, A.M., Specialist in Primitive Textiles, and formerly Associate Professor of Home Economics in the University of California. In this little volume the author has presented a most comprehensive and handy book of reference for both the teacher and student of the elementary and historical development of the textile industry.

Miss Kissell, through her former connection with the American Museum of Natural History in New York City and her extensive travels, is recognized as a close student of the primitive textile arts in all countries, but especially as exhibited among the aboriginal races of North and South America. This study she has found a useful basis for her professional teaching of home economics, a subject of prime importance at this moment of the world's history, when conservation of clothing materials is of so great importance. She writes, therefore, primarily from the point of view of an instructor of youth—the coming home builders—whether directly as fabric artisans or as the consumers of fabrics.

The method of presentation is concise, definite, intensely interesting, and, within the limits intended, broadly inclusive. The bibliography is remarkably complete, covering over 230 books and pamphlets, with repeated references by volume and page as the subject develops. The illustrations with which the book is replete are reproduced from cited original sources, carefully annotated, and where diagrammatic are remarkably simple though definitely explanatory.

Systematically arranged, according to subject matter and availability for slide making, there are further long lists of illustrations; one set following each list of books as given in the text; one in Appendix B, citing from noted magazines and reproductions of famous paintings, with discriminating comments, and one in Appendix C, specially listed for young students. The manner of using the book is carefully explained for each class of readers, juvenile and adult, and is easily understood, so that whether few or many of the references can be found in any one library, the subject is well covered.

Published by The Macmillan Company, New York, 1918. Cloth, 5 x 7½ in., 252 pages. 89 illustrations. Price, \$1.50.

WILLIAM D. HARTSHORNE.

QUARTERLY REPORT OF THE BOSTON WOOL MARKET
FOR OCTOBER, NOVEMBER, DECEMBER, 1918, AND
DECEMBER, 1917.

DOMESTIC WOOLS. (F. NATHANIEL PERKINS.)

	1918.			1917.
	October.	November.	December.	December.
OHIO, PENNSYLVANIA, AND WEST VIRGINIA.				
(WASHED.)	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
XX and above	77	78	78	75
X	*	*	*	72
Blood	*	*	*	82
"	*	*	*	82
"	*	*	*	82
Fine Delaine	87	90	90	82
(UNWASHED.)				
Fine Clothing	67	64	62	65
Blood, Staple	78	78	76	76
"	78	76	76	76
"	77	75	75	76
Fine Delaine	75	75	74	75
MICHIGAN, WISCONSIN, NEW YORK, ETC.				
(UNWASHED.)				
Fine Clothing	64	63	61	62
Blood, Staple	76	76	74	75
"	77	75	75	75
"	76	74	74	
Fine Delaine	73	73	72	72 @ 73
KENTUCKY AND INDIANA.				
(UNWASHED.)				
Blood	79	77	77	80
"	78	76	76	80
Braid	68	68	68	67 @ 68
MISSOURI, IOWA, AND ILLINOIS.				
(UNWASHED.)				
Blood	76	75	75	73
"	75	74	74	73
Braid	67	66	66	67 @ 68
TEXAS.				
(SCOURD BASIS.)				
12 months, fine and fine medium . .	175	175	175	172
Spring, fine and fine medium . . .	160	160	155	152
Fall, fine and fine medium	150	150	150	150
CALIFORNIA.				
(SCOURD BASIS.)				
12 months, fine	175	175	175	170
Spring, fine	160	160	160	150
Fall, fine	147	147	147	145
TERRITORY WOOL: Montana, Wyoming, Utah, Idaho, Oregon, etc.				
(SCOURD BASIS.)				
Staple, fine and fine medium . . .	185	180	180	180
Clothing, fine and fine medium . .	*	*	*	170
Blood	178	168	168	168
"	155	145	145	145
"	140	125	125	132
NEW MEXICO.				
(SCOURD BASIS.)				
No. 1	165	162	162	172
No. 2	155	150	150	160
No. 3	135	120	120	140
GEORGIA AND SOUTHERN.				
Unwashed	68 @ 70	68 @ 70	67 @ 68	70 @ 71

* But little in the market.

BOSTON, January 4, 1919.

DOMESTIC WOOLS.

In the opening of the last quarter of the year, the prominent question in the minds of wool merchants and manufacturers was what action the Government would probably take regarding allotments to mills for civilian purposes. The gradual depletion of the stocks of wool in the hands of manufacturers left them in an uncomfortable condition of uncertainty. At this period with no surety of when the war might close, with the government buying committee about completing their voyage to the Argentine and the open question of what the Government would do regarding taking the 1919 domestic clip, wool merchants were placed in a rather trying position, as they naturally had their thoughts in the direction of what would occur in the new year, regarding the domestic and South American new clip.

November opened with the arrival of the government buyers in Buenos Aires. Manufacturers were more restless about the non-distribution of wools for civilian purposes. The storage situation was helped by the availability of storage facilities in the new Government "Overseas" warehouse. The signing of the armistice at once made the situation as to the future of wool a most acute question, with much speculation as to how the Government would dispose of the large accumulation of wool bought in anticipation of a prolonged war. The proposed plan of selling the wools from time to time by public auction with a fixed minimum price seemed to meet with general favor.

December. The noticeable occurrence of this month was the commencement of the distribution of the immense stocks of wool held by the Government by auction. The first of these was held at Boston on the 18th, 19th and 20th of the month. The results of the sale were somewhat unsatisfactory, many lots were withdrawn and there was no very marked activity in bidding. The fact that the authorities announced no minimum price that they would accept interfered largely with the success of the effort. Sales will be continued in Boston, and later of carpet wools in Philadelphia.

F. NATHANIEL PERKINS.

FOREIGN WOOLS. (MAUGER & AVERY.)

	1918.			1917.
	October.	November.	December.	December.
	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
Australian Combing:				
Choice	100	100	100	.....
Good	90	90	90	.....
Average	85	85	85	.....
Australian Clothing:				
Choice	92	92	92	.....
Good	87	87	87	.....
Average	70	70	70	.....
Sydney and Queensland:				
Good Clothing	85	85	85	.....
Good Combing	90	90	90	.....
Australian Crossbred:				
Choice	105	105	105	.....
Average	100	100	100	.....
Australian Lambs:				
Choice	90	90	90	.....
Good	87	87	87	.....
Good Defective	75	75	75	.....
Cape of Good Hope:				
Choice	75	75	75	72 @ 73
Average	60	60	60	57 @ 62
Montevideo:				
Choice	85	85	85	83 @ 86
Average	80	80	80	75 @ 80
Crossbred, Choice	85	85	85	85 @ 88
English Wools:				
Sussex Fleece . . . . .	.....	.....	.....	.....
Shropshire Hogs . . . . .	.....	.....	.....	.....
Yorkshire Hogs . . . . .	.....	.....	.....	.....
Irish Selected Fleece . . . . .	.....	.....	.....	.....
Carpet Wools:				
Scotch Highland, White . . . . .	.....	.....	.....	.....
East India, 1st White Joria . . . . .	.....	.....	.....	.....
East India, White Kandahar . . . . .	.....	.....	.....	.....
Donskoi, Washed, White . . . . .	.....	.....	.....	.....
Aleppo, White . . . . .	.....	.....	.....	.....
China Ball, White	50 @ 55	50 @ 55	50 @ 55	60
" No. 1, Open	45 @ 50	45 @ 50	45 @ 50	52 @ 55
" No. 2, Open	41 @ 46	41 @ 46	41 @ 46	40 @ 45

BOSTON, January 5, 1919.

FOREIGN WOOLS.

During the period under review, values having been fixed by the Government, quotations have not changed.

Owing to arrivals from Australia and South America, supplies have gained on the demand.

China wools, also, are more readily obtained, carpet manufacturers not seeking these wools as freely as usual.

The signing of the armistice in November, practically closing the great world war, completely upset all government and commercial calculations on the requirement of wool for manufacturing purposes, and the market continued at a standstill for the remainder of the quarter. The one feature of importance was the inauguration of a system of auction sales by the Government as a beginning of the disposal of its immense holdings of the fiber. It is understood that the Government held wool equals 325,000,000 pounds of various kinds and classes.

MAUGER & AVERY.

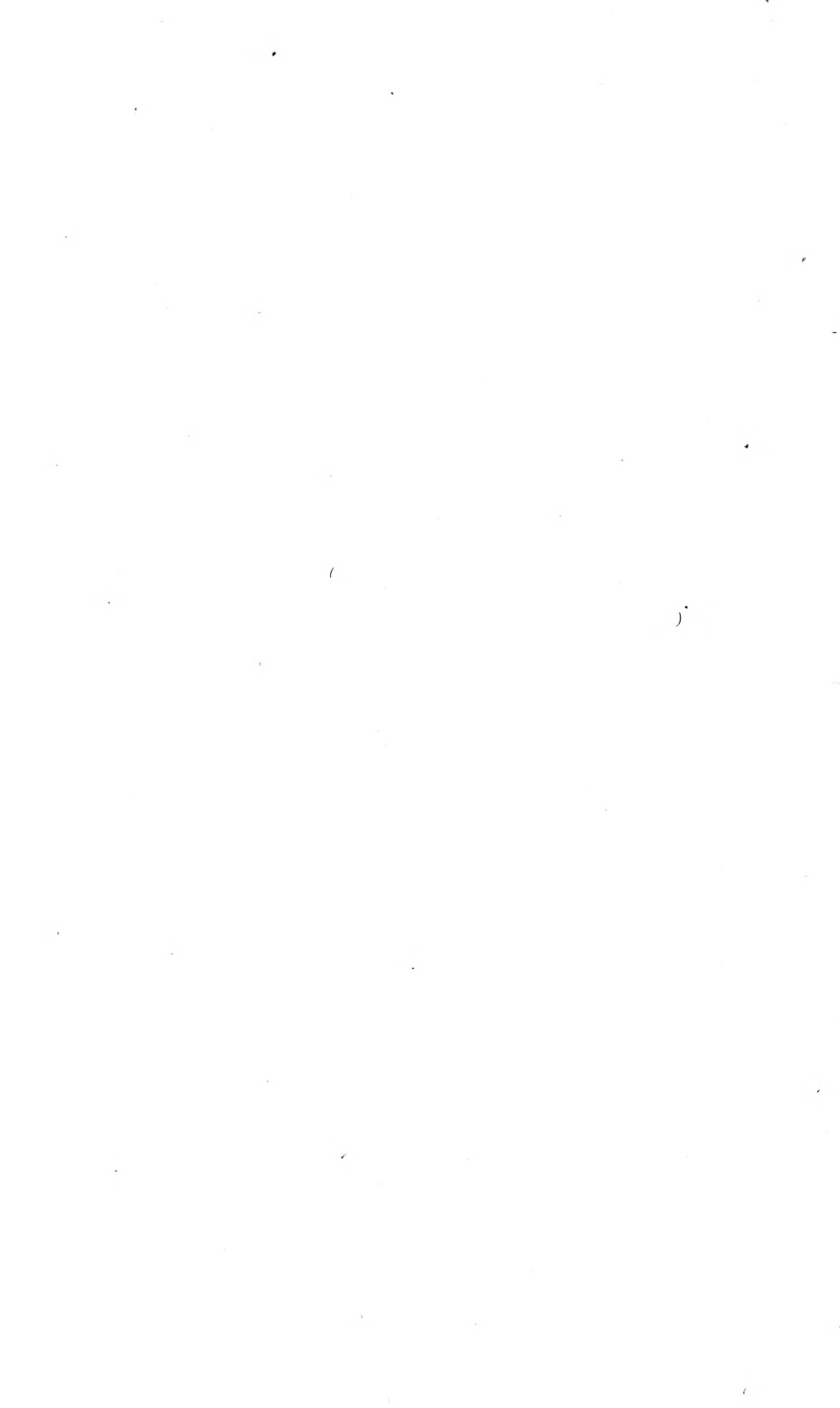
PULLED WOOLS. (W. A. BLANCHARD.)

	1918.			1917.
	October.	November.	December.	December.
	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
Extra, and Fine A	170 @ 175	170 @ 175	170 @ 175	. . . . .
A Super	155 @ 160	155 @ 160	155 @ 160	. . . . .
B Super	145 @ 150	145 @ 150	145 @ 150	. . . . .
C Super	115 @ 130	115 @ 130	115 @ 130	. . . . .
Fine Combing	165 @ 170	165 @ 170	165 @ 170	. . . . .
Medium Combing	155 @ 160	155 @ 160	155 @ 160	. . . . .
Low Combing	125 @ 140	125 @ 140	125 @ 140	. . . . .

JANUARY 3, 1919.

REMARKS.

There is nothing in particular to be said of the market for pulled wools for the three months under review. The Wool Administrator still controls the situation. The plan of disposal of wools by auction, owned by the Government, was inaugurated in December and will be continued from time to time as conditions make advisable.



BULLETIN

OF THE

National Association of Wool Manufacturers

A QUARTERLY MAGAZINE

DEVOTED TO THE INTERESTS OF THE NATIONAL WOOL INDUSTRY.

VOL. XLIX.]

BOSTON, APRIL, 1919.

[No. II.

FIFTY-FOURTH ANNUAL MEETING.

PROCEEDINGS AND REPORTS OF THE NATIONAL ASSOCIATION OF WOOL MANUFACTURERS.

RECENT general meetings of the National Association of Wool Manufacturers have been held in New York City, but it was decided to return to Boston this year for the fifty-fourth annual meeting, which occurred at the Copley-Plaza Hotel, at 3 P.M. on Wednesday, February 5, 1919. Mr. Frederic S. Clark, the President of the Talbot Mills and President of the Association, presided.

ADDRESS OF THE PRESIDENT.

President Clark, in his annual address to the members of the Association, referred to the reports of the Secretary and the committees for the details of the activities of the Association during the past year, and outlined the general work that had been undertaken, saying:

The War Service Committee, consisting of five of our prominent members and the President, acting with a like number of the American Association, have devoted a very great deal of time to their duties, and have been indefatigable in their efforts to serve the Government and the industry. I believe no manufacturing industry has placed itself more fully at the disposal of the Government in supplying its needs than ours, and this is in one way indicated by the enormous supplies of woolen fabrics on hand and in process on November 11th, the date of the signing of the armistice.

Many conferences have been held by the committee with the Quartermaster Department in regard to the adjustment of contracts. While I believe that it has been the intention of the officials to deal fairly with contractors, the regulations adopted from time to time have not been in all respects commercially just and satisfactory, but the last schedule is much more so, and the Department is apparently willing to consider special action in cases of particular hardship.

We are passing through a period of drastic readjustment in business, but I believe a demand which will tax the capacity of our machinery waits only on the stabilizing of conditions. The removal by the War Trade Board of restrictions on the importations of wool, the recent announcement that British issue prices will be maintained as minimum prices on the Government-owned wools until July 1st, and the announced early resumption of auction sales in London are all favorable influences towards this end, but I still believe that the Government wools should be sold without restrictions as to price, as originally recommended by the War Service Committee. If the present plan, however, is to be maintained, the more rapid distribution of the large supply would, in my judgment, be greatly facilitated if the Government's minimum price for each lot was stated in the catalogue and if lots withdrawn because of failure to receive this price were sold at private sale to buyers willing to pay it.

While in normal times our high wages and other excessive costs will, I think, prevent any large exportations of woollen goods, it is quite possible that by utilizing the recently established Textile Alliance Export Corporation, in the management of which we are a participant, we may derive much benefit, not only in meeting the present enormous needs of Europe following the war, but later when normal conditions have returned.

We all know that the present tariff would have been ruinous to our industry if the war had not intervened to prevent its effective operation, and that if no change is made, we cannot compete with foreign manufacturers when their home conditions enable them to manufacture goods for export. Just how soon this will occur we do not know, but in the case of England I believe it is not far distant. In anticipation of that event, and the possibility of tariff legislation, at a special session of the coming Congress, we have appointed a Tariff Committee to study carefully the needs of the industry. That committee has already had an informal conference with Chairman Taussig and Commissioner Costigan, of the United States Tariff Commission, and Chairman Taussig has indicated a desire for another conference in the near future.

The labor situation in our industry presents great difficulties for its successful conduct. The demand of textile workers for an eight-hour day, or forty-eight-hour week, with the same wages as for fifty-four hours, cannot in my opinion be justified. Their wages have been advanced approximately 100 per cent during the war and such a change would add 12½ per cent to the labor cost, and the total cost would be still more enhanced by the loss of 11 per cent in product. It has been glibly said that the manufacturer can pass this added cost on to the consumer, but this would be grossly unfair, for there is an enormous body of consumers in clerical, educational, and various professional occupations whose incomes have increased comparatively little, and because of the very high cost of clothing they have been obliged to exercise extreme economy. They have a right to expect a lower cost for clothing and ought to get it. A material increase in our conversion costs will also surely open our markets to imports from abroad in great volume. We cannot expect tariff rates high enough to protect unreasonable conversion costs.

It is gratifying to state that our Association has increased materially in membership during the year, and that we now represent approximately the following percentages of the total machinery of the country engaged in the manufacture of cloth and dress goods and the spinning of yarns:

Looms.....	55 per cent.
Sets of Woolen Cards.....	35 " "
Woolen Spindles.....	33 " "
Worsted Spindles.....	66 " "
Combs	76 " "

Let us endeavor in the coming year to exert an influence in caring for the interests of our industry proportionate to the production which we represent.

REPORT OF THE SECRETARY.

Following the address of President Clark, the report of the Treasurer, and the report of the auditor who had examined the accounts of the Association, were read, approved, and ordered to be placed on file. The report of the Secretary was read, approved, and ordered to be published in the quarterly Bulletin, as follows:

To the Members of the National Association of Wool Manufacturers:

As required by the by-laws of the Association, the Secretary herewith submits his report for the year ending with the last day of January, 1919.

Because of the presentation of the affairs of the Association in the address of the President, Mr. Frederic S. Clark, and the report of the War Service Committee which covers so large a share of the recent activities of the Association, my own report will be briefer than usual. It has been a period of continued and intensified effort on the part of the American wool manufacturing industry to sustain the Government in the great war, and in the latest months, of another and no less difficult effort to tide the industry over from war to peace conditions. Such an experience as that through which we have been passing since April 6, 1917, is strongly calculated to impress upon the minds of men the need and the importance of coöperative action, and it is not strange, therefore, that there has been a constant increase in the membership of the Association and a broadening of its work and of its resources.

Throughout the year the monthly canvass of active and idle machinery and of the proportion of machinery engaged upon Government work has been followed with the utmost interest not only by manufacturers and merchants but by officials of the Government. Well has this particular undertaking, initiated by the Association five years ago, justified itself by practical experience. Indeed, so valuable in the eyes of all observers has this systematic canvass become that the Government desired to take it over and make it a part of its own statistical activities, and upon request from the Washington officials the change was duly consented to by the Association, to become operative with the canvass of November 1, 1918. This work is, therefore, now being performed by the Bureau of Markets of the Federal Department of Agriculture, which is also compiling the monthly returns of the wool consumption of American mills, just as three years ago at the request of the Association it assumed the preparation of the annual estimates of the wool production of the country. But the preparation and publication of the annual wool review of the wool industry of the world are still continued by the Association, and on every succeeding January, as for many years, this review is a feature of our quarterly Bulletin—the handiwork of our experienced and devoted Assistant Secretary and Statistician, Mr. William J. Battison.

So far as was practicable throughout the year the Association has endeavored to carry on its work of compiling and ex-

changing actual wage rates in the principal occupations of the wool manufacture in the chief districts of the United States. So rapidly have these wage rates been voluntarily advanced during the year past that it has been difficult to keep up at every stage of this progression. But the efforts of the Association in this direction will now be resumed, with a view to securing a complete analytical record of wage rates in our industry. It should be borne in mind that the reports of all the mills sent in at our request on the form schedules furnished are held in confidence by us, and that only the *average* of wage rates in each given district ever becomes known or is given out for publication. In the renewal of this important work—all the more important because of the approach of the time for the enactment of a new tariff law—we invoke the prompt and frank coöperation of all manufacturers.

A steadying influence upon our industry so far as the future is concerned has been exerted by the Congressional elections of November, 1918, in which the protectionist forces secured a majority in both branches of Congress—a very substantial majority in the House of Representatives. According to all historical precedents, this signifies a complete, decisive protectionist victory in the national elections of November, 1920, and a restoration of the American system of protection as the guiding economic policy of the United States. Anticipating this event, the Executive Committee of the Association has authorized, and President Clark has appointed, a special Tariff Committee representative of the various departments of our industry. This committee has already entered upon its work, and has held a preliminary conference with members of the United States Tariff Commission.

It is the earnest desire of the officers and members of the Association that the new tariff law, which it is hoped may endure for many years, shall be framed on just principles in the open light of the most precise and authoritative information. Events of the past four years have powerfully confirmed the wisdom of the founders of our Government in seeking to attain for America the utmost possible degree of economic independence through the steady encouragement of all the great basic national productive industries. It is not too much to say that the far-seeing policy of Washington and of Lincoln, which was the dominant national policy throughout the greater part of our national existence, and was never more effectively exemplified than during all but a few years of the period from 1861 to 1912, had in 1917-1918 proved the salvation of America and through America of the liberty of the world. The actual decisive factor in the world-conflict now triumphantly ended was the industrial power and the man

power of the United States, the foremost manufacturing nation on the planet and, therefore, the most potential of nations in the waging of modern war.

Because of the double activities of the Association, of which he is the chief executive and of the War Service Committee of the Wool Manufacturing Industry, of which he is the Chairman, an altogether exceptional draft has been necessary upon the time and energies of Mr. Frederic S. Clark, our President—for which the Association and the industry owe him an unusual debt of grateful acknowledgment.

I wish to express my own appreciation to him and the other officers of the Association for their prompt coöperation and encouragement in all the varied undertakings of the year.

Respectfully submitted,

WINTHROP L. MARVIN,
Secretary.

REPORT ON THE WAR SERVICE COMMITTEE.

A report of the work of the War Service Committee of the Wool Manufacturing Industry, of which President Clark is Chairman, was presented by the Secretary as follows:

As the Chairman and one-half the members of the War Service Committee of the Wool Manufacturing Industry were officers and members of the National Association of Wool Manufacturers, it seems proper that a report of the year's activities of this important board should be presented to the Executive Committee and to this Association.

The War Service Committee was created in the closing weeks of the year 1917, to succeed the Joint Committee of Wool Manufacturers Coöperating with the Council of National Defense, which had completed its faithful and successful work in Washington. These War Service Committees, representing all the great national productive industries whose assistance was vital to the Government in war, were all appointed under the auspices of the Chamber of Commerce of the United States. Their most direct relationship was with the War Industries Board, though they were under obligation to be "ready at all times to meet with any of the departments of the government whenever their advice is desired, to discuss questions affecting the industry raised by the war needs of the government." Particularly was the War Service Committee expected to act "as a clearing house for available plant capa-

city, notifying the government thereof, in order that needless expenditures for additional plants and equipment may, as far as possible, be avoided."

As it turned out, the War Service Committee of this industry was called upon to render a very much broader service than its first instructions might have indicated. In March, 1918, Major General Goethals, acting Quartermaster General, called upon the Chairman and several of his colleagues of the committee, and one or two other representative manufacturers, to serve as a board of experts for the revision and improvement of the standard specifications for army cloths. This important task was satisfactorily accomplished—complete new specifications being submitted to General Goethals on March 21, and immediately approved and made effective.

The War Service Committee so energetically pursued its work of securing the active coöperation of all mills capable of making army cloths that on May 29, 1918, Mr. H. P. Bonties, Chief of the Woolens Section of the Clothing and Equipage Division of the Quartermaster Department, announced that the army purchasing program was covered up to September 30, 1918. Mr. Bonties further stated at that time that "It is probable that the looms now running on army fabrics comprise about 30 per cent of the total machinery in the country, or about one-half of the looms actually equipped for that particular production."

The War Service Committee urged upon the manufacturers of the country that in view of the growing military needs no olive drab fabrics of army weights be offered to civilian trade without first being submitted to the Quartermaster Department. The committee took an active part in the conservation of the country's wool supply for military requirements, and urged upon the War Industries Board, the War Trade Board and the Shipping Board the necessity of eking out the insufficient home clip by facilitating a large importation of foreign and particularly South American wools for the war emergency.

The War Service Committee coöperated to the fullest extent with the efforts of the Government to control for its own imperative uses the wool stocks of the nation, and aided the strict enforcement of Government regulations to that end. On July 12, 1918, the War Service Committee sent out to all manufacturers a frank statement of the wool situation and an impressive warning of the need of rigid economy, in view of new Government plans contemplating an army of 5,000,000 men. Under the direction of Brigadier General R. E. Wood, who had succeeded Major General Goethals as acting Quartermaster General, exact statements of the wool stocks on hand

and in sight were prepared, and the War Service Committee, acting for the War Industries Board, late in August through a searching questionnaire secured from the mills definite statements of the kind and amount of materials in their possession, and of the amount of goods that could be produced. Frequent conferences were held by members of the War Service Committee with the officials in charge of the Government departments, and as the war progressed the situation in the wool manufacture was taken more and more firmly in hand for the safeguarding of the supreme interests of the national forces.

On October 22, 1918, the Quartermaster Department announced that it was prepared to anticipate its next year's needs, to keep in active employment the wool manufacturing machinery of the country for which no civilian wools seemed to be available. This important step had followed upon vigorous representations made by the War Service Committee to the War Industries Board, in Washington.

When a cessation of hostilities came months sooner than had been expected, and the armistice was signed on November 11, 1918, the War Service Committee promptly addressed itself to the new task of endeavoring to readjust the industry to peace conditions. At that time approximately 60 per cent of the wool manufacturing machinery of the country was engaged upon Government orders. The War Service Committee particularly sought the release of Government-owned wools for civilian manufacture and urged frequent and unrestricted public auctions for that purpose. The committee exerted its influence also to secure an equitable adjustment of pending army contracts which had to be reduced or terminated. The committee feels that it can now be released from service, as the work can be carried on by the wool manufacturing associations, and it is not proposed to reappoint the committee.

The composition of the War Service Committee as first chosen was as follows:

On behalf of the National Association—

Frederic S. Clark of North Billerica, Mass., President of the Talbot Mills, Chairman.

Franklin W. Hobbs of Boston, President of the Arlington Mills.

George H. Hodgson of Cleveland, Vice-President and General Manager of the Cleveland Worsted Mills Company.

Nathaniel Stevens, President of M. T. Stevens & Sons Company, North Andover, Mass.

William M. Wood of Boston, President of the American Woolen Company.

On behalf of the American Association—

Herbert E. Peabody of New York, Selling Agent of the Shelbourne Mills, Vice-President and Secretary.

Robert T. Francis of New York, Selling Agent of the Pontoosuc Woolen Manufacturing Company.

J. P. Stevens of New York, of J. P. Stevens & Company.

A. L. Gifford of New York, of the Worumbo Company.

George B. Sanford of New York, of Sanford & Russell.

Mr. Peabody, who was selected to be the committee's special representative in Washington, resigned his secretaryship and membership in the committee to become Chief of the Woolens Section of the War Industries Board, in association with John W. Scott, of Carson, Pirie, Scott & Co. of Chicago, who early in June became the Director of the Textile Division of the War Industries Board. Mr. Peabody was succeeded as Secretary and Washington representative of the War Service Committee by George B. Sanford, while for the vacant place on the committee the American Association named Manton B. Metcalf of Metcalf Brothers & Company, New York, who had followed Mr. Peabody as President of the Association. When Mr. Gifford resigned from the committee to undertake another important public responsibility, he was succeeded by Charles H. Wilson of Pittsfield, Mass., of James & E. H. Wilson. J. J. Nevins, Secretary of the American Association of Woolen and Worsted Manufacturers, and Winthrop L. Marvin, Secretary of the National Association of Wool Manufacturers, acted as Assistant Secretaries of the committee.

REPORT ON NATIONAL INDUSTRIAL CONFERENCE BOARD.

President Clark and Mr. Joseph R. Grundy, delegates of the National Association of Wool Manufacturers in the National Industrial Conference Board, of which the Association is one of the constituent members, presented their report:

The National Industrial Conference Board was organized and is being developed around an industrial research department. It is the Board's chief aim to ascertain the facts influencing the industrial situation, in order that, based on a knowledge of these facts, the Board members may take joint council and, if necessary, engage in joint action.

Eighteen of the great national associations of manufacturers are now members of the National Industrial Conference Board; in addition, two of the largest State associations of

manufacturers have already joined the Board as associate members, under a new ruling recently promulgated, and other State associations are expected to become associate members. The National Industrial Conference Board today comprises in its membership practically all branches of American industry and is conspicuously the representative of American industry. This position has been recognized by the United States Government first, when it requested the National Industrial Conference Board to name five representative manufacturers as members of the War Labor Conference Committee and later of the National War Labor Board, for the purpose of reducing strikes and settling industrial disputes during the war; again, when the Conference Board was asked by the Government to appoint a committee to coöperate with the War Labor Policies Board in helping to stabilize industry during the war; and more recently, when the Secretary of the United States Department of Commerce requested the Board to appoint a committee for coöperation with that Department. President Clark has been appointed a member of the committee.

In the field of industrial research the National Industrial Conference Board has in addition to the two reported last year issued eleven reports, each dealing with a vital industrial problem of timely interest.

The third research report, entitled "STRIKES IN AMERICAN INDUSTRY IN WARTIME," presents the results of a first-hand study as to the extent and character of strikes in American industry during the first six months of our participation in the world war, viz., from April 6 to October 6, 1917. The startling aggregate loss of production of war essentials is sharply contrasted with similar experience in Great Britain and Germany.

In the fourth, seventh, and eleventh research reports, the Board gives the results of original studies in respectively the cotton, boot and shoe, and woollen manufacturing industries of the hours of work as related to output and health of workers. This information is of very timely interest on account of various legislative proposals and demands by labor organizations for a reduction of the daily and weekly work schedule. Similar investigations in respect to the silk industry, the metal manufacturing trades, foundry industry, and other major industries are now under way.

The fifth research report, entitled "THE CANADIAN INDUSTRIAL DISPUTES INVESTIGATION ACT," presents historically and statistically the results of ten years of operation of that Act. Knowledge of these experiences is of considerable value

in judging various plans proposed from time to time for the settlement of industrial disputes. Similar studies of conciliation and arbitration laws in other States are now being made by the Board, one of which has already been published as Research Report No. 10, entitled "ARBITRATION AND WAGE FIXING IN AUSTRALIA."

Research Report No. 6, on "SICKNESS INSURANCE OR SICKNESS PREVENTION?" contains a concise but comprehensive analysis of the fallibility of claims made for the enactment of health or sickness insurance laws in the United States, and expressed the Board's opinion on this important subject.

In Research Report No. 8, entitled "WARTIME EMPLOYMENT OF WOMEN IN THE METAL TRADES," the Board has sought to collect the experience of American manufacturers who employ women on work heretofore performed only by men.

Similarly, in Research Report No. 13 the experience of American manufacturers with rest periods during the regular work periods, especially for women workers, is presented as corollary to similar reports previously issued in regard to rest periods in British industries.

Of particularly timely interest are Research Reports Nos. 9 and 14, dealing with "WARTIME CHANGES IN COST OF LIVING," the former relating to the period from July, 1914, to June, 1918, and the latter extending the study so as to cover the period from July, 1914, to November, 1918. It is the intention of the Board to issue supplemental cost of living reports three or four times a year.

Research Report No. 11, entitled "THE EIGHT-HOUR DAY DEFINED," is an attempt to clarify the distinction between the various types of the so-called eight-hour day and to explain concisely the meaning of each.

Last, but by no means least, Research Report No. 15, entitled "READJUSTMENT IN THE UNITED STATES," deals with a vitally important and timely subject. This study outlines the major phases of the readjustment problem and views them from various angles without suggesting any definite solution of the problems. This task is reserved for later reports, for which this research report furnishes the foundation.

Moreover, the Board is now engaged in a study of wartime changes in wage rates and earnings, and in the extent and character of absenteeism in industrial employment. Investigations of similar subjects of primary and timely importance and industrial in character are contemplated.

In addition, the Board has devoted much attention to national revenue legislation and has from time to time presented to the United States Congress suggestions for changes in pending revenue bills and for interpretative and administrative

rulings on national tax laws, in order that industry may not suffer from unjust and inequitable taxation or from the necessity of preparing unduly laborious reports.

An interesting feature of the Board's work is the "INDUSTRIAL NEWS SURVEY," issued weekly by the Board. It is a digest of industrial news as reported in reliable newspapers, magazines, reviews and Government documents and is intended to give to the manufacturer a bird's eye view of the industrial situation from week to week.

As stated before, the chief work of the Board is to ascertain the truth in respect to the industrial situation and to find equitable solution for industrial problems. As an aid to this end, the Board has decided to offer \$1,000 in a prize essay contest for the best monograph on one of a number of specified economic subjects applicable to industrial conditions.

Some of the reports above mentioned have been sent to our members and Mr. Marvin will endeavor to supply others on request.

FREDERIC S. CLARK,
JOSEPH R. GRUNDY,
Delegates.

At the conclusion of the report, President Clark and Mr. Grundy were re-elected on the part of the Association as delegates to the National Industrial Conference Board for the year 1919.

REPORT OF THE NOMINATING COMMITTEE.

Mr. Arthur E. Mason, Treasurer of the Hamilton Woolen Company and Chairman of the Nominating Committee, presented a report, offering the following list of officers for 1919:

OFFICERS FOR 1919.

PRESIDENT.

FREDERIC S. CLARK North Billerica, Mass.

VICE-PRESIDENTS.

WILLIAM M. WOOD Boston.

GEORGE H. HODGSON Cleveland, O.

FRANKLIN W. HOBBS Boston.

SECRETARY AND TREASURER.

WINTHROP L. MARVIN Boston.

EXECUTIVE COMMITTEE.

ANDREW ADIE	Boston.
C. BAHNSEN	New York.
CHESTER A. BRAMAN	New York.
JACOB F. BROWN	Boston.
FREDERIC C. DUMAINE	Boston.
WALTER ERBEN	Philadelphia.
JULIUS FORSTMANN	Passaic, N.J.
HENRY A. FRANCIS	Pittsfield, Mass.
LOUIS B. GOODALL	Sanford, Me.
EDWIN FARNHAM GREENE	Boston.
JOSEPH R. GRUNDY	Philadelphia.
GEORGE C. HETZEL	Chester, Pa.
GEORGE E. KUNHARDT	Lawrence, Mass.
CHARLES W. LEONARD	Boston.
JAMES R. MACCOLL	Pawtucket, R.I.
WILLIAM MAXWELL	Rockville, Conn.
FRANK H. METCALF	Holyoke, Mass.
STEPHEN O. METCALF	Providence, R.I.
THOMAS OAKES	Bloomfield, N.J.
NATHANIEL STEVENS	North Andover, Mass.
WILLIAM H. SWEATT	Boston.

A TARIFF STATEMENT.

From the Executive Committee the following resolution on the subject of the protective tariff was presented:

Resolved, by the National Association of Wool Manufacturers, in annual meeting, That we interpret the results of the Congressional elections of November, 1918, as forecasting an even more decisive protectionist triumph in the National elections of 1920, and a return to the American system of a tariff for both revenue and protection.

Resolved, That we regard the reestablishment of the economic policy of Washington and Lincoln as indispensable to the maintenance of the great national productive industries of America against the competition of Europe and Asia, and as particularly necessary to the stability of wage rates in the textile industries of this country, which have virtually doubled since the war began.

Resolved, That we are earnestly of the belief that the new Federal tariff law should be carefully framed by the committees of Congress with the help of the most exact and comprehensive information that can be obtained, to the end that the

law may be just, adequate, and enduring. For our own industry we pledge our heartiest coöperation with the United States Tariff Commission and the national lawmakers, so that the tariff schedules may be formulated with the fullest available knowledge of essential facts.

Mr. Franklin W. Hobbs, President of the Arlington Mills, Mr. Warner J. Steel, Bristol, Pa.; Mr. Spaulding Bartlett, Treasurer of S. Slater & Sons, Inc., Mr. Oliver Moses, Treasurer of the Worumbo Company, Mr. William Maxwell, Treasurer of the Hockanum Mills Company, Mr. George E. Kunhardt, President of the George E. Kunhardt Corporation, and other manufacturers present discussed the general labor situation in the mills, consequent on the demand for a 48-hour week which had been generally granted.

From the Executive Committee the following resolution on preference in employment for returning soldiers and sailors was presented:

Resolved, That the National Association of Wool Manufacturers earnestly approves the expressed purpose of the manufacturers of the country to give preference in employment to honorably discharged soldiers and sailors of the United States who have earned such recognition from their fellow-Americans.

Resolved, That this declaration be transmitted to all the members of this Association.

In the evening a dinner was given by the Association at the Copley-Plaza to four hundred manufacturers and merchants. President Frederic S. Clark presided at the head table, and with him there were seated Mr. Henry C. Emery of the Guaranty Trust Company of New York, formerly a member of the United States Tariff Board under President Taft and formerly Professor of Political Economy in Yale University; Lieutenant Colonel F. S. Evans, C.B.E.-D.S.O., of the Royal Artillery, British Expeditionary Forces; Mr. William Whitman, ex-President of the Association; Mr. Franklin W. Hobbs, President of the Arlington Mills; Lieutenant Colonel William B. Gracie of the United States Army; Major O. T. Simpson of the United States Army; Mr. Samuel G. Adams, President

of the Boston Wool Trade Association; Mr. E. W. Brigham, Government Wool Distributer; Mr. Frederic C. Dumaine, Treasurer of the Amoskeag Manufacturing Company; Mr. Charles W. Leonard, President of the Holden-Leonard Company; Mr. E. W. Fairechild, President of the Daily Trade Record Company of New York; Mr. A. C. Bigelow of Philadelphia, President of the More Sheep-More Wool Association; Mr. Courtenay Guild, publisher of the Boston Commercial Bulletin; Mr. James Akeroyd, Secretary of the Philadelphia Wool and Textile Association; Mr. Magnus W. Alexander, Managing Director of the National Industrial Conference Board; Mr. J. J. Nevins, Secretary and Treasurer of the American Association of Woolen and Worsted Manufacturers; Mr. Henry G. Lord, President of the Bragdon, Lord & Nagle Company, Inc.; Mr. F. Nathaniel Perkins, Secretary of the Boston Wool Trade Association; Mr. Clark McKercher of New York, counsel for the Woolen Goods Exchange, and Mr. Winthrop L. Marvin, Secretary and Treasurer of the National Association of Wool Manufacturers.

The speakers of the evening, introduced by President Clark, were Mr. Emery who described his experiences as prisoner of war in Germany and his observations there in the summer and autumn of 1918, and Lieutenant Colonel Evans, who spoke graphically of the war and of its results and problems.

A FORTY-EIGHT-HOUR WEEK.

IMPORTANT CHANGE GENERALLY ACCEDED TO BY
AMERICAN AND BRITISH MANUFACTURERS.

AFTER years of agitation an earnest demand was made by the textile employees on the textile manufacturers of this country for a 48-hour working week, with the opening of the new year 1919. Some weeks before that time formal action had been taken by the United Textile Workers of America at a meeting in New York City on November 18, 1918, where-in resolutions were adopted as follows:

Whereas, The United Textile Workers of America have for years past in their respective conventions gone on record in favor of the eight-hour day for textile workers; and

Whereas, We believe that if there are any workers entitled to the eight-hour day, it is those employed in textile mills, hundreds of thousands of whom are women and girls; and

Whereas, The principle of a maximum work-day of eight hours has been endorsed by the President of the United States and officially by the United States government as a standard of productivity, of living and of conservation protecting the workers against over-fatigue, and enabling them to make their most effective contributions to production, and be more useful and honorable members of society; therefore be it

Resolved, That this convention go on record in favor of the eight-hour day for all textile workers of the country, same to go into effect on February 3, 1919; and be it further

Resolved, That we, the representatives of the United Textile Workers of America, do hereby pledge ourselves to use all legitimate means within our power to secure the eight-hour day on February 3, 1919, for all textile workers and call upon organized labor and its friends and all those who favor this humane, progressive and justifiable effort of the United Textile Workers of America, to co-operate to the fullest extent that success may crown our efforts to bring a shorter work-day to the hundreds of thousands of men, women, and children employed in the textile industry.

This request of the workers was not immediately communicated to the mills in general, but it soon appeared in the

public press, and in the first weeks of 1919 was sent to many mills by various local unions.

It ought to be understood in this connection that the organization known as the United Textile Workers of America includes only a fraction of all the textile employees of this country, though the union has been in existence for many years and has long been affiliated with the American Federation of Labor. In very few textile manufacturing communities are even a majority of the textile workers regularly organized, though some of the most highly skilled branches have their permanent unions and strong ones. It was insisted, however, in the present case that the request for eight hours fairly represented the sentiment of the textile workers in general.

Up to the signing of the armistice on November 11, 1918, before this demand was formally advanced, the American textile industry, particularly the wool and cotton departments, was working to almost its maximum capacity. Between government business and civilian business the machinery of the industry was well employed and general conditions were highly prosperous. But the armistice had brought a sudden and momentous change. Fully 50 per cent of the machinery of the wool-manufacturing establishments of the country was engaged upon government work at the first of November. Immediately the placing of further contracts by the Government was suspended when the armistice was signed. In so far as possible, existing contracts were reduced or cancelled. Meanwhile civilian business proved discouragingly slow in developing, principally because of the artificially high price of raw wool, all of the available American supplies of which were closely controlled by the Government.

With considerable amounts of machinery becoming inactive, with few or no orders for new business, and with workers steadily being dismissed because of lack of employment, the month of January, 1919, seemed to be a singularly ill-chosen period for such a radical step as the adoption of a 48-hour work-week, which would eventually mean a decrease in total production and an increase in the cost of production. For the time being textile manufacturers were almost unani-

mously opposed to the granting of the proposal of the United Textile Workers of America. It was not known at first whether the workers contemplated a request for the payment of the same wages for a 48-hour week that had been given for a 54 or 55-hour week, but on this point officials of the United Textile Workers soon made it clear that the shortened work-week was all that was asked for. If that boon could be secured, the labor leaders said that they were willing to defer a wage increase to later consideration, or not to insist on it at all.

In this shape the question rested when February 3 came around—the date on which the Textile Workers had asked that the 48-hour week be made effective. It transpired that the crux of the movement really rested on the wool manufacturing center of Lawrence, Mass., and there the American Woolen Company, the principal factor in local manufacturing, determined to grant its workers a 48-hour week and time and a half for overtime—with, however, only 48 hours' pay and not 54 hours' pay for the shortened working period. Tacitly here and there the same basis was accepted by most other textile manufacturers of the immediate section, though in some communities textile mills continued to operate at a rate of 54 hours a week without an increase of wages.

In two important wool manufacturing communities, Lawrence, and Passaic, New Jersey, serious labor difficulties immediately developed. Most of the English-speaking workers in Lawrence quietly accepted the 48-hour week and remained at work in the mills that were able to furnish the requisite employment. But the non-English-speaking workers in Lawrence to a large degree left the mills, insisting that 54 hours' pay for 48 hours' work should be conceded by the manufacturers.

In Passaic radical leaders demanded an increase of 35 per cent in wages, a 44-hour week, recognition of the union, and "closed shops." Of course the manufacturers could not consent, and the chief Passaic mills were promptly closed in consequence—it being manifest that they could not be run without the gravest difficulty.

There was also trouble in Woonsocket, but this was soon adjusted by an amicable arrangement.

In the midst of the transition period from government business to civilian business, manufacturers generally were not averse to a breathing space, so that in both Lawrence and Passaic there ensued several weeks of partial idleness in most of the textile establishments. But in Lawrence, though the trouble did not wholly end, the striking employees began to drift back from the outset of the difficulty. Before long some of the mills had all the workers to whom they could give employment. The situation steadily continued to improve in spite of violent efforts by the radical strikers to intimidate the English-speaking employees and to keep them from their work. At this writing the plan of coercion is apparently proving unsuccessful, for the Lawrence mills are filling up their complements.

At Passaic, after various efforts at conciliation, the strikers agreed to go to work on Tuesday, March 25, on the basis of a 48-hour week with 48 hours' pay. There were to be no "closed shops." The Passaic mills, as they had always done, recognized the right of the workers to organize for their own benefit, just as the mills themselves did, and the hope was expressed that the workers would be animated by the generous spirit that had been shown by the Industrial Council of Passaic Wool Manufacturers. The manufacturers were willing to meet representatives of their own workers, according to the already-established custom, but there could be no exclusive recognition of the union, no "closed shop." Because the workers had suggested that the shortening of the work-day might bring some wages down to a point where they would not permit of a proper livelihood, the Passaic manufacturers consented to talk the matter over with representatives of the workers, in order to see whether some mutually satisfactory arrangement could be reached to prevent any actual injustice. The final text of the agreement at Passaic was as follows:

1. The woolen manufacturers recognize the right of their employees to combine together in a union for their mutual benefit.

2. The workers shall have the right to organize a shop committee in each department of the employers' mills, which shall receive all complaints or grievances and submit same to the management for an amicable adjustment. No discrimination shall be exercised by the employers because of union activity on the part of any individual or committee.

We, the undersigned manufacturers, are willing to submit the question of wages to an arbitration committee of five, to be made up of two representatives of the manufacturers, two representatives of the strikers, and one other who is to be acceptable to both sides.

BOTANY WORSTED MILLS.
 FORSTMANN & HUFFMANN COMPANY.
 GARFIELD WORSTED MILLS.
 GERA MILLS.
 NEW JERSEY WORSTED SPINNING COMPANY.

This agreement was entered into in entire good faith and with a clear understanding of its purposes by the Passaic wool manufacturers. But many of the Passaic workers, having only an imperfect knowledge of the English tongue, seem to have misapprehended the details of the agreement, or else to have been under the spell of Bolsheviki agitators. For, a few hours after re-entering the mills on the morning of March 26, the majority of the workers walked out again, protesting that the agreement was not what they had anticipated, and that the manufacturers were not observing it. Meanwhile, the Dundee Textile Company and several large rubber manufacturing concerns of the Passaic district had promised their employees 55 hours' pay for 48 hours' work. These circumstances caused another wave of unrest to roll over Passaic, and employees of the wool manufacturing establishments, meeting on the morning of March 26, formulated and presented new demands. They declared for double pay for overtime, for 55 hours' pay for 48 hours' work, and for the right to compel every one to join the union within one week, including all firemen, examiners and clerks, as well as the recognition of the shop and department committees of the union.

Thereupon the Industrial Council of Passaic Wool Manufacturers posted the following notification:

All employees who left work in violation of the agreement entered into through the mediation of Mr. Furey, Government Conciliator, between the company and the strikers, are hereby discharged. The mills will be closed until April 1st, when new workers will be accepted for all departments. No union or shop committee will be recognized by this mill. The management will always be glad to receive complaints by individuals or committees of its own workers, for their adjustment of grievances.

Working time—48 hours per week, 7:20 A. M. to 12 noon, and from 1 P. M. to 5 P. M. Saturday 7:20 A. M. until 12 noon—55 hours' pay for 48 hours' work. Time and a half for overtime.

On Tuesday morning, April 1, the Botany, Forstmann & Huffmann, Garfield, Gera, and New Jersey Worsted Spinning mills were all reopened in accord with the announcement. Under a guard of regular and special police—the latter three hundred strong including many veteran soldiers and sailors—entire order was maintained, and those workers who wished to re-enter the mills did so without difficulty. The result was gratifying to the Passaic manufacturers, about one-third or more of the employees of the largest mills returning.

FORTY-EIGHT HOURS IN GREAT BRITAIN.

A determined movement for a shortening of the work-week developed in the last months of 1918 among the organized textile workers of Great Britain. The demand of many of them, in fact, was for a 45-hour week as contrasted with the 55½-hour standard before the war. Inevitably the question came up for consideration in the national Wool Textile Industrial Council wherein both manufacturers and employees were represented. The Council on February 3, 1919, agreed to a 48-hour week subject to confirmation by the members of the organizations on each side. Following is the text of the British agreement:

That on condition that the trade-unions agree to take all possible steps to insure that the greatest possible output will be secured and maintained, it is agreed—

(1) That where the existing normal working week exceeds 48 hours it shall be reduced to 48 hours.

(2) That this reduction shall come into force on March 3.

(3) That the existing time rates of wages per week shall be paid for the reduced hours.

(4) That piece rates shall be increased by the percentage reduction of hours, except that in the case of Wales the matter be referred to the Welsh District Council.

(5) That the application of all clauses shall be decided by (a) the Master Dyer's Committee and representatives of the workmen's societies concerned; (b) the West of England District Council; (c) the Welsh District Council; (d) the British Wool Federation and trade-unions concerned; (e) the combing, carbonizing, spinning, manufacturing, and shoddy employers' representatives, and the representatives of the trade-unions concerned.

In this same connection the National Wool (and Allied) Textile Industrial Council considered and adopted as the continuing policy the agreement relative to the substitution of men by women and the return of discharged soldiers that had been formulated in the worsted and woollen industries in the West Riding of Yorkshire in February, 1916, as follows:

1. That substitutions of men by women are temporary, and that those men who have joined His Majesty's forces shall be entitled to be reinstated in their former employments, if and when they return fit for resuming them. Men thus reinstated shall receive the rates of wages to which they would have been entitled had they remained in continuous employment. It shall generally be considered that a man who is discharged from His Majesty's forces without a pension shall be entitled to resume work at the standard rate of wages, other cases to be dealt with by the committee set up under the agreement.

2. That where new men are introduced into an occupation, such men shall be paid the local standard or scheduled rate for that occupation.

3. That where women, in consequence of this agreement, are employed to take the places of men, such women shall not continue to be so employed after men become available.

4. That where women are employed to take the places of men the rate of wages for such women shall be:

(a) If at piece rates, the same as for men, unless women's rates are already established for the class of work, provided no woman shall receive less than the district rate for women.

(b) If at time rates for daytime work, and one or more women replace an equal number of men, they shall be paid the same rate of wages now being paid to males for an equivalent quantity of work, and, in any case, not less than four-fifths of the rate previously paid to the men they replace.

(c) If at time rates for daytime work, and a larger number of women are required to replace a smaller number of men, the aggregate wages paid to the women shall not be less than the aggregate wages paid to the men they replace, and in no case shall the wage paid to an individual woman be less than four-fifths of the wages previously paid to the man replaced.

5. That where any work people are not fully employed through shortage of work, the women who have taken the places of men shall be the first to be discharged or suspended, provided that qualified men can be found to do the work.

6. That a central joint committee shall be appointed, consisting of seven representatives of the employers' and seven of the workmen's representatives; the personnel of which may be changed from time to time by the two parties so far as their own representatives are concerned. The committee shall have power to add persons for the purpose of obtaining evidence in support of any claim. It shall also settle the interpretation of the foregoing clauses and deal with any dispute that may arise, providing that such dispute cannot be settled by a local joint committee of the employers' and workmen's associations, and is referred by that joint committee to the central joint committee.

7. That where existing arrangements provide for the trade-union to act as the medium for the supply of labor, such arrangements shall not be affected by this agreement.

In Germany, where a working week of 60 hours was not unusual before the war, the new socialistic government has established a national maximum eight-hour day and 44-hour week for all factories, workshops, industrial and commercial establishments. The statute proclaimed by the national administrators of Berlin places the responsibility of its administration upon the different State governments. This 44-hour working week was proclaimed to be effective on January 1 throughout Germany.

PRODUCTIVE SHEEP HUSBANDRY.

ARE WE ABOUT TO ENTER A NEW PERIOD IN THE
SHEEP INDUSTRY OF THE UNITED STATES?

A REVIEW OF PROFESSOR W. C. COFFEY'S NOTABLE VOLUME.

By JOHN BRUCE McPHERSON.

OUR war experiences have made the thinking people of the United States understand, as no other recent ones did, how important and vital to our comfort and safety is the wool industry of the country;—and by the term “wool industry” I mean in this instance both wool growing and wool manufacture.

The importance of the farmers and stockmen of the country has been impressed upon all, because upon the result of their toil and thought the people of the Entente countries largely relied. Were we not told and told again that “Food will win the war”? Without the food produced by the farmers and the wool and meat produced through the efforts of the shepherds and herdsmen of this and other countries, the victory by the forces of light over those of darkness could not have been achieved.

A DEBT IS OWED TO FARMER AND FLOCK-MASTER.

The farmers and stockmen have gained a new dignity and importance in the world, and many now gladly acknowledge that the present-day civilization depends as much upon them as upon any class, for without food and raiment chaos would soon sweep over the world. No longer will there be sneers, we hope, in the halls of Congress or on the hustings at “the shepherds of West” or “greazer herdsmen,” for even in peace times millions who eat meat, use wool in many forms, and wear wool clothing, are indebted to them, not only for some of the luxuries of life but for the actual necessities. Their skill and ceaseless vigilance in caring for the flocks have been of priceless worth to the wool manufacture, which was so rapidly developed in this country in the last half century,

and to-day supplies the needs of the consumers of this mighty and constantly growing Republic.

That the importance of farm husbandry is recognized, and that intelligent leaders are at hand to direct the efforts of men interested in all its branches, is shown by the publication of a series of Farm Manuals by the J. B. Lippincott Company, the last of which to appear, *Productive Sheep Husbandry*, has just come from the press.

The author of this interesting and valuable volume is Walter C. Coffey, Professor of Sheep Husbandry in the University of Illinois at Champaign. Professor Coffey is a Harvard man who, while studying in Cambridge, got first hand information about the wool manufacture which has helped him in the writing of this treatise, the most important book on sheep that has appeared in this country since Randall's *Practical Shepherd* which also bore, it is interesting to note, the impress of the Lippincott Company in 1864.

OUR DEPENDENCE ON FOREIGN WOOLS.

Stirred by our great dependence upon foreign countries for a large part of the wool consumed in domestic mills, as was disclosed to our amazement during the war, an earnest effort has been made in the past year to arouse a fresh and widespread interest in sheep in sections long since sparsely tenanted by this money-making and soil-enriching animal. Professor Coffey, we are glad to observe, says in his preface that "all indications at the present point to the beginning of a new period in the sheep industry of the United States," and "for the first time in our history we are attempting to give attention to the whole problem of mutton and wool production."

Though Dr. Randall admitted in 1864 that "where the market for mutton is large and near its production it is more profitable as a leading object than the production of wool," he yet held it "equally true that the demand for wool in the United States is far less adequately supplied already with the domestic product; and that this demand must go on increasing with the increase of our entire population." He believed that "our vast interior regions remote from meat markets or

from which the transportation to such markets is distant or expensive, can be more profitably devoted to the production of wool as a leading object than mutton."

Dr. Randall's prediction respecting the growing needs of the country for an expanding production of wool were correct. He did not expect, however, the rapid settlement and development after the war of the Middle West, the Rocky Mountain states and the continental domain to the Pacific Ocean, or the network in all that region of railroads with their refrigerator cars to carry the wool and frozen meat to consumers living thousands of miles from the place of production.

THE DAY OF CHEAP RANGE IS OVER.

"The sheepman," Professor Coffey says in his preface, "now realizes that 'the march towards the setting sun' in search of new and cheap range is over and that various phases of agriculture are demanding and receiving recognition in regions which he once regarded as solely his own." He also realizes, the author declares, that "land values have advanced and costs of operation increased to a point where the haphazard and wasteful methods once practised in handling sheep can no longer be depended upon to yield profits," all of which changes he believes presage a better and more successful sheep husbandry.

When Dr. Randall wrote in 1863 sheep were increasing rapidly in many of the states west of the Mississippi and those adjacent to the northern bank of the Ohio River. In all the newer states land of great fertility with highly nutritious grasses could be purchased for \$1.25 an acre and even in states like Illinois, Missouri, and Wisconsin, though the prices were higher, they were greatly less than for grazing lands of half their fertility in the older Eastern states. In all that far domain were pastures deemed inexhaustible, which were expected to continue for years as the ranges for many sheep bands of varying sizes. Writing of the conditions in those states, Dr. Randall said:

"It is not necessary for the wool grower now, nor will it be for many years to come in most of the above states, either

to own or pay rent on a great proportion of the lands depastured by his sheep. We have no redundant population ready to take up with lands which are destitute of any of the essential requisites demanded by the settler."

Even in Illinois, which then had a population of more than a million, immense tracts of land lay open and free to the use of all. What Dr. Randall could not sense in the midst of the Civil War occurred soon after its close—the great increase of population and the consequent rapid development of all the states over which the sheep roamed when he wrote, a development which caused flock-masters to push on toward the frontier in search of cheaper pastures and a new habitat.

THE INDUSTRY'S EVOLUTION—AN ABSORBING STORY.

The story of this industry—its early beginnings in this country, its successes and disappointments, its spread throughout the land, with development in some sections and lack of expansion in others, in a word, its evolution, is one of absorbing interest.

To many, if not most, wearers of wool garments wool is simply wool. Not one in ten users has the faintest idea of the necessity of certain wools or certain mixtures to produce desired results. Little do they know of the large sums of money invested by the wool growers of the United States, of the countless experiments made or labor expended to improve the flocks and produce the results demanded by the eater of mutton and consumer of wools. And because of these various demands at different periods in the history of the industry there was introduced a procession of breeds imported from the best known foreign flocks to improve our native stock. In this evolution, perhaps no more marked in the growing of sheep than in other branches of the livestock industry, or even in general agriculture, itself, the grower, like the farmer of the East, has had greatly to modify former customs, introduce new methods, and change his objects with the demands of fashion and the eccentricities of the market. Attempting to adjust himself to the new requirements he has not infrequently met with great discouragements—some caused by his own ignorance and inexperience and others by events which

he was powerless to control. Suffering heavy financial losses, many retired discouraged and disgusted with a pursuit which at times promised so much, but yielded permanently so small a return.

TRANSFER OF FLOCKS CONTEMPORANEOUS WITH MOVEMENT OF POPULATION.

The transfer of the flocks from East to West has been contemporaneous with the shifting of population, the organization of new territories and their admissions to the Union. Always with the movement of the people over mountains and down the rivers went the flocks of sheep to provide wool for their raiment and food for their sustenance. The legend, "Westward the Star of Empire takes its way," may be applied as truly and fittingly to sheep raising and wool growing as to political power. Beginning along our Eastern coast, thriving most in the latter part of the 18th and the first part of the 19th century in our New England states, it has moved ever westward slowly and steadily decade after decade, until the furthestmost shores of the Pacific have been touched. The whole vast continent has been traversed, and during the migration great and lasting changes have occurred in the flocks, their management, and their characteristics.

The author sketches the migration in this country in a few pages and shows how the center of sheep population, like the center of human population, has moved westward in every decade. In 1840 the census showed the region of densest sheep population was in Vermont, New Hampshire, and New York, there being at that time practically no sheep in the far West, except those of the Navajo Indians in northern New Mexico. The only state west of the Mississippi having sheep in considerable numbers was Missouri. Ten years later that part of Ohio lying south of Lake Erie was the region of densest sheep population. There was a noticeable decrease in Vermont, New Hampshire, and New York and quite an increase in Michigan, Indiana, Kentucky, Tennessee, and Illinois, and flocks were to be found in Wisconsin and Iowa. The census of 1860 reported sheep in Texas and California. Ten years later it showed a great increase in sheep numbers in the Mississippi

Valley and the far West, and again a further decrease in the above named Eastern states. By 1880 the southeastern sections of Wisconsin and Michigan and much of Ohio were the regions of densest sheep population, while Nebraska, Kansas, Wyoming, Colorado, and the Dakotas, which ten years earlier were almost unoccupied, showed a liberal sprinkling of flocks. By 1890 all of the Western states and territories were populated and by 1900 the Rocky Mountain region had become the most important sheep section of the country. By 1910 the census showed that 58.41 per cent of the sheep of the United States were in the West, although Ohio, Wisconsin, and Michigan still had a density greater than some of the Western states.

SMALL FLOCKS PROFITABLE IN GREAT BRITAIN AND NEW ZEALAND.

This migration was due to the constant search for new pastures at low cost, to the onrush of population, the consequent demand for land, and its increased value. The large flocks feeding on the open range gradually disappeared and in their places appeared in the regions abandoned the small farm flocks kept in fenced fields now typical of the industry, except in the Western states. And this change does not necessarily mean, if we can rely on the experience of Great Britain and New Zealand, that the sheep population cannot be maintained and increased or that the industry cannot be made profitable for the men engaged in it. New Zealand has less than twice the area of the state of Illinois, and in 1910 within her confines were sustained 23,792,000 sheep; that number having been maintained, with only comparatively slight variation, for a number of years. With anything like that density in this country, enough domestic wool could be grown to supply all our own needs. Certainly this experience of sheepmen in Great Britain and New Zealand should greatly encourage the patriots in the United States who are working to arouse our people to a realization of our needs, the necessity of meeting them, and the folly of relying too greatly upon foreign sources of supply.

On the ranges the author says that from three to fifteen acres are required for one sheep, whereas according to the hurdling method seen in its perfection in Great Britain and

in Scotland, several sheep may be supported on each acre of land.

FEW WORLD CENTERS OF WOOL GROWING.

When it is understood that to-day there are comparatively few world centers of sheep raising and wool growing, of which four—the South American countries, South Africa, Australia, and New Zealand, are in the Southern Hemisphere—then will it be realized how vitally important are an adequate clip of home-grown wool for our clothing and a sufficient supply of mutton for our tables. That the sheep of the United States produce a fleece of good weight is shown by a comparison of our flocks and the amount of wool produced, with the number of sheep in Argentina and the wool produced there. According to reliable estimates in 1912, Argentina had in that year 83,545,000 sheep which produced 264,500,000 pounds of wool. In 1916 the United States had 48,483,000 sheep which produced 288,490,000 pounds of wool. In other words, with 45 million fewer sheep we produced 24,000,000 more pounds of wool than did Argentina. Great Britain with 27,552,000 sheep in 1915 produced 121,200,000 pounds of wool, and New Zealand with 24,600,000 sheep produced 181,282,000 pounds of wool.

The author points out that “the importance of the sheep industry in the United States cannot be determined by merely comparing numbers, because sheep are considerably more valuable on the head basis than they were years ago and the revenue from each sheep is much greater than in days of wool growing only.”

TYPE OF WOOL GROWING HAS CHANGED.

The type of wool grown now, as all familiar with the industry know, has changed greatly since the day when broadcloths were worn generally and the merino wool was in greatest demand. Although breeders have by no means, Professor Coffey says, “ceased to pay attention to wool, yet it is perhaps safe to say that the day of improvement characterized by an attempt to get into the fleece the maximum of fineness, length, and weight, has begun to wane.” The rise in the

importance of mutton has brought about many crosses where the bulk of the wool was formerly merino. The sales of enormous amounts of cross-bred wool in the Bradford markets, the author thinks, indicate either a check to progress in wool improvement through breeding or a readjustment of the notions of wool improvement. In his opinion it is an indication of the latter. Though the search has been going on for some years a desirable combination of mutton and wool, the author says, "is still a large problem in the western ranges and as yet a type possessing what is desired in wool and mutton properties, together with certain other characteristics, has not yet been fixed."

Before the day of improved machinery which now enables the manufacturer to comb shorter wools than formerly could be used for that purpose; before the extension of railway facilities to all sections of the wool-growing states, and before the development of refrigerating transportation, there was a smaller proportionate demand for mutton than at present. Consequently the West had little use for mutton sheep.

FEEDING SHEEP FOR MARKET.

Among the changes which have appeared in the development of the industry is that of sheep feeding or fattening for the market sheep purchased on the ranges. This began in the early nineties in and about the great flour mills in Minneapolis and St. Paul, where, previous to that time, the screenings were considered as waste, and thousands of tons of valuable material were annually cast into the river.

In 1892 William Wyman of Hamline, Minnesota, conceived the idea that such waste could be used to fatten sheep and, his experiment proving successful, large feeding yards were soon established not only near the mills but also in some instances in Nebraska and Kansas. The profitableness of the business aroused an interest in sheep feeding, and also in the screenings, which advanced in price, causing reduced profits and not infrequently financial losses to the sheep growers. More than ten years ago the majority of the large feeders near the milling centers ceased operations, and now only in the years when prices for corn and hay fall below normal are

sheep fed to any large extent in Kansas and Nebraska. To-day Colorado is the only place where large operators feed regularly and it is doubtful, Professor Coffey thinks, whether they will continue for many years more "because the time has come when they cannot be fully assured of profits;" and for this, he says, "there should be no regret, for sheep feeding properly belongs to those who raise a part or all of the feed."

MARKED CHANGES ON WESTERN RANGES.

In the last quarter century changes of a marked character have taken place on the western ranges also. When the sheepmen first went into the West little land was permanently occupied and their chief difficulty was with the cattlemen, with whom many serious contentions arose, the sheepmen usually securing the range because of their numbers. But they, in their turn, have had to retire before the advance of the growing numbers of settlers and homesteaders who, locating on lands having water, forced the sheepmen to dig wells, build reservoirs, or seek new ranges. Other difficulties arose when immense national forests were created and brought under the control of the Federal Department of Agriculture. Because of these changes it has been necessary to reduce the numbers of sheep on the range, and the cost of running them has been increased in various ways. Because only alternate sections in some states, like eastern Colorado, are available for grazing, the size of the bands has been greatly reduced, and because the sheep must be driven more, extra help is required and the cost of such labor has greatly increased. In 1895 herders could be secured in New Mexico for \$15 per month and in California for \$25. "It would take from three to four times these wages," the author declares, "to get herders at the present time." The ownership and withdrawal of much land have also made trailing from one range to another difficult and expensive.

On account of these changes sheepmen have felt it necessary to invest heavily in land, often buying at prices ranging from \$5 to \$15 per acre, holdings which cost the homesteader not exceeding \$3 per acre. With the purchase of land has

gone the necessity of building fences at a cost of \$150 per mile, the construction of buildings and corrals, not previously deemed necessary, and the cultivation of some land to produce feed.

On the other hand, the extension of railway facilities for getting sheep and wool to market has been general. In the earlier days ranches were far removed from any railroad center, but now spurs of railways have penetrated many regions not before tapped. Prior to the Government control of railroads the cost of shipping by rail to Boston based on 100 pounds varied, the author says, from \$1.32 to \$2.60, and even now "it costs more to ship wool to Boston from points in the inter-mountain region of the West than it does from the interior of Australia by way of Liverpool." Sheepmen are becoming more and more tolerant in their views, Professor Coffey avers, concerning the control of the National Forests; this indicates, in his opinion, "that those in charge are earnestly seeking means of allowing sheep owners to get a maximum amount of good from the forests."

COST OF PRODUCTION INCREASED.

After considering all the favorable changes in the range the author feels that most of the changes have tended to raise the cost of production and to render the sheep business more complex. At the present time the man who engages in the business must be equipped with both sheep and capital, whereas in the early days the latter could be very largely ignored. The day when any one who could herd sheep might enjoy a fair degree of success as owner, has passed, for business instinct and organization are now required to make a sheep outfit pay. The days when sheep herders rambled around in solitude with their flocks furnished experiences and adventures which cannot be repeated. The picturesque and romantic period of the sheep business on the Western ranges has, Professor Coffey says, "passed beyond recall. Cold figures, close calculations and clever organization rule now, and business men hold the reins wherever profits are made."

THE BOOK IS INVALUABLE TO SHEEP RAISERS AND WOOL GROWERS.

But the volume is not solely descriptive or historical. It is much more than that and everywhere is invaluable to men in the industry, with its chapters on the structure of sheep, how to judge them, how to manage and feed the flocks, prepare them for market, and also to market the wool. Chapters IX. to XXVIII., inclusive, are devoted to the various breeds of sheep with their characteristics, advantages, and objectionable points indicated.

Chapter XXXV. is devoted to the wool clip and excellent advice is given the flock-master on the requisites of good wool, its cleanliness, the necessity for uniformity and strength of fiber, the classes and grades of wool, the requirements of good shearing, and the kinds of twine to use and to avoid, as well as the proper method of packing wool for market.

The book is profusely illustrated and no one can gaze at the splendid specimens of sheep shown in the illustrations without admitting that the industry has made great strides in the country since that long ago day when the Merino first appeared on our shores.

Professor Coffey is to be heartily congratulated on producing a book, not only extremely interesting and valuable for the student of wool growing in the United States, but also a thorough and helpful compendium on sheep to all engaged in any way in one of the key industries of our country. It is a volume heretofore badly needed and one which, we hope, will arouse throughout the country an intelligent interest in and genuine love for sheep.

“Productive Sheep Husbandry,” by PROF. W. C. COFFEY. J. B. Lippincott Company, Philadelphia and London. Price, \$2.50.

A WORLD-TREND TO PROTECTION.

THE SIGNIFICANT PRESENT COURSE OF EVENTS IN THE
UNITED STATES AND IN EUROPE.

By WINTHROP L. MARVIN.

WHEN President Wilson last summer in his fourteen points declared for a prohibition of "economic barriers" he speedily found it expedient to explain that this was only a figure of speech, and that all questions of protection or free trade or the choice of fiscal policies would continue to be left, in the making of world peace, to the "self-determination" of each country. Since that time, and in the press of peace making, the various countries have been rather plainly indicating the courses which they desire to pursue, and it is significant that in every one of them the drift is manifestly toward a vigorous national protectionism.

First, the United States in the Congressional elections of November, 1918, displaced a tariff-for-revenue-only majority by a strong protectionist majority in the new House of Representatives, and created a narrow but presumably sufficient protectionist majority also in the Senate, where only one-third of the total membership was presented for the verdict of the voters. If elections had been held for all instead of for only one-third of the Senators, it is probable that there would have been an overturn quite as emphatic as that which the House afforded. As it was, the American people unmistakably proclaimed a decided preference for an economic policy the exact antithesis of that which President Wilson and his followers had advocated.

In certain academic circles a marked degree of shell-shock followed this result. There had been sanguine anticipations of a very different outcome. "Are we not the Allies of Great Britain, France and Italy—and how can we then raise tariff barriers against them?" To those who had not understood

protection or the motives for it this line of reasoning may have seemed sufficient—but the fact was that just as the war was won and before the armistice was concluded the American people had declared that they would at first opportunity re-establish a system of substantial preference for American industry. This was the clear voice of the elections at a time when our national attitude toward Great Britain, France, and Italy was more cordial than it had ever been before.

Yet, there is nothing surprising or inconsistent in this circumstance. The great war had brought us into the friendliest and closest relations with our Allies on the other side of the Atlantic. It had also aroused and intensified the American national spirit, just as had the earlier great war of 1861-1865. It is not true, however, and it never has been true—the contention of the foes of protection to the contrary notwithstanding—that the advocacy and enactment of protective tariff laws are expressions of hostility toward other peoples and other governments. The advocates of free trade who have urged this point have been mistaken—that is all. When Washington and Lincoln and McKinley and Roosevelt have upheld what long ago came to be known and recognized as the American system of protection, they have not done this for the sake of injuring foreign nations but simply to provide for some decent safeguarding of the welfare of their own household.

In the minds of the great leaders of American protectionism—and it is well to remember that all of the greatest of our national leaders, including Jefferson and Jackson, greatest of Democrats, were protectionists—the aim of protective tariff legislation has always been to secure an adequate national revenue and at the same time to give the people of our own country a fair, equal chance in manufacturing and in other essential occupations. And, historically, this fair, equal chance is all that has been secured, in addition to the necessary national income. There has been much loose talk of “prohibitive” tariffs, of tariffs that “strangled” and “destroyed” trade. But all these violent partisan assertions, when they are coolly analyzed, are easily seen to be, like

President Wilson's remark about the sweeping away of "economic barriers," mere figures of speech, and nothing more.

Under all of our protective laws imports of foreign merchandise of most kinds have continued. Indeed, to the confusion of many free traders of more zeal than information, under protective tariffs the volume and value of our imports have often been greater than under tariffs for revenue only—the ready explanation being that in the protective periods the productive industries of our country have been so active and the people so prosperous that there was a brisk market here for both American and foreign goods alike. Moreover, in modern years it has been no part of the protectionist philosophy to lay heavy duties on goods of a kind which we do not ourselves produce here. Indeed, the free list as we have long known it is almost a Republican invention. Under the Dingley and Aldrich-Payne tariff laws about one-half in value and 70 per cent in bulk of all our imports from foreign lands came in without paying any duty whatsoever. These facts may not be familiar in some academic circles, but that they are well understood in commercial circles is demonstrated by the historic dominance of the protectionist party in the very States that are in closest touch with foreign countries and actively conduct our seaborne shipping trade.

Protection in our time consists in placing duties on foreign products that sharply compete with similar products of the industries of our own country. The purpose is twofold—first to furnish revenue—(and to do this these duties must not be and in general never are so high as actually to be "prohibitive")—and second to require foreign producers to pay a sufficient tax for entering our market to make sure that their lower-paid labor gains no advantage over our higher-paid labor—or, in other words, that our labor has a fair chance to supply the needs of the American people.

Now, this latter purpose is not and never has been dictated by hate of foreign nations. In our own practice, our tariff is applied equally against all foreign lands. If there are exceptions, they are for dependencies like Cuba or tropical countries like Brazil, with a production wholly different from

our own. We make no effort to employ our tariff policy to discriminate against foreign governments that may not be quite so friendly to us as other governments—we habitually treat all alike.

There can be no reasonable complaint from our Allies around the council board in Paris because we are preparing to return as soon as may be to the protective tariff principle which President Wilson and his followers overthrew in 1913. The American people themselves decreed this at the very climax of victory, when the mutual attachment of the Allied governments was distinctively more in evidence than it has become under the strain of international debates over terms of peace and a league of nations. That impressive decision of November, 1918, cannot possibly be misinterpreted as an unfriendly act toward friendly governments—all the more because all of these other governments, as has already been stated, are now actively preparing to adopt and enforce protective tariff policies of their own.

Early in the war Great Britain, the one important exemplar of free trade in all the world, began to adopt fiscal measures that were frankly protectionist in their character. While our anti-protectionist Congress was framing only direct taxation for the purpose of increasing revenues, the British Parliament was approving heavy increases in the duties on imported goods, and was actually prohibiting the importation of some important manufactures, like motor cars, various machinery, etc., which came particularly from the United States. Early in this present year the British government placed an absolute ban upon a long list of finished products of manufacture. Great Britain is now deriving from tariff duties an amount per capita of \$10.25, while the per capita from imports in the United States is only \$2. While President Wilson and his followers were heaping high the direct taxation of American business and curtly refusing to make any levies upon the products of foreign industry, the British government, whose fiscal policy our National Administration and its adherents had enlogized as ideal, was getting further and further away from free trade and was embracing the principles and methods of protectionism. Only the other day in

the House of Commons, Andrew Bonar Law, leader in the House of Commons, announced "that the prosperity of Great Britain depends upon its increased production." "Imperial preference," Mr. Bonar Law declared, "will be put into effect at the earliest possible moment."

Mr. Bonar Law went on to insist that "the most vital vested interest in the country is high wages," and he added, "We may be asked by labor how it will be possible to maintain high wages if cotton goods from Japan are put into the markets at a lower price than British manufacturers must pay for cotton." And he added, "It is ridiculous to suppose that the old conditions will continue."

If this is not a formal, official throwing overboard of the long-time British policy of *laissez-faire* it comes perilously near it. The present British plan is to impose substantial duties on imports in general and to lower these duties in favor of the products of the various colonies and dependencies of the British Empire. That is to say, the governing forces in the Empire have come to the conclusion that they will adopt a system of protectionism encircling the world.

Just how this ambitious plan will operate in practice remains to be determined. Of course such a policy on the part of the British government will not be beneficial to America—but the British government is very frankly considering British interests first—just as France is considering French interests and Italy Italian interests. Both of these Allied governments are preparing to increase their tariff rates as soon as peace is securely established. They are also making vigorous efforts to rehabilitate their merchant shipping industries which have heavily suffered in the war. On the other side of the globe, in Australia, Acting Premier Watt announced on March 25 last that his government proposed to undertake a revision of its tariff laws as soon as possible, "with the object of developing Australian industries." "The great war has taught Australia many lessons," said Mr. Watt, "among them being that the Commonwealth's geographical isolation and the long ocean haulage make it necessary for her to develop along some more self-reliant lines. The government, therefore, has in view in the proposed tariff

amendments the promotion of those great key industries the raw materials for which are in the confines of the Commonwealth and upon which so many other enterprises are based."

There was a time when New South Wales clung ostensibly to a free-trade policy while the other colonies that had combined to join the Australian Commonwealth were protectionist. When union was accomplished, all Australia adopted the protective policy at the demand particularly of the working masses of the people, who have ever since controlled Australia's union government.

The abandonment of free trade in the United Kingdom is not so difficult a task as might be imagined—for the adoption of free trade in 1846 was confessedly a matter of expediency and not of principle. For four hundred years Great Britain had been the chief and the most extreme protectionist nation in the world, and under this policy had become before the middle of last century the greatest of manufacturing and trading nations. It was a plausible argument that Great Britain had grown industrially and commercially so strong that under free trade she could defy competition—and that if her example should induce the governments of other nations to adopt free trade also, Great Britain would be in a position to dominate their markets and come nearer still to a monopoly of the manufacturing and commerce of the globe.

It was this shrewd appeal to self-interest rather than any purely economic argument that won the assent of British manufacturers and merchants to a free-trade policy. For a time it appeared as if the plea were sound and effective. Great Britain's principal industrial competitor was France, and France herself was leaning to free trade under the third Napoleon. But when the French monarchy fell in the Franco-Prussian war and the French republic was established, the masses of the French people who came into power were not in favor of free trade. On the contrary, they threw about their own productive industries a higher and higher measure of protectionism, while the newly founded German Empire embarked on a vigorous protectionism of its own. Meanwhile, the United States, freed from the incubus of slavery and of the slave power which had favored free trade, became under

Lincoln, Grant, and their successors the foremost protectionist nation and soon the foremost manufacturing nation in existence.

British manufacturers and merchants have seen their country slip since 1846 from first place in manufacturing to a dubious third place. They have seen even the foreign commerce of Germany and of the United States grow more rapidly than their commerce. They have come to recognize that a free-trade policy is no longer expedient for them—that apparently it has proved to be a losing policy. It is not surprising, therefore, that the British Parliament, under the leadership of the new union government in which the masses of the British people have a greater voice than ever before, is more and more discarding the principle and practice of free trade, and is leaving the world without a single important exemplar of the free-trade policy, unless China, whose free trade is enforced on her from outside, be so considered.

WOOL STOCKS AND CONSUMPTION.

STOCKS OF WOOL ON HAND. THE CONSUMPTION OF 1919
COMPILED FROM OFFICIAL SOURCES.

By WILLIAM J. BATTISON.

THE Bureau of Markets of the Federal Department of Agriculture continues its valuable quarterly reports of stocks of wool in the hands of dealers and manufacturers. From them the following tabular statements are compiled:

WOOL STOCKS, DECEMBER 31, 1918.

As Reported by 231 Dealers and 523 Manufacturers.	Held by		Total.	Estimated Equivalent Grease Wool.
	Dealers.	Manufacturers.		
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
Grease Wool:				
Domestic	68,572,887	19,929,986	88,502,873	
Foreign	13,350,022	38,671,868	52,021,890	
Total	81,922,909	58,601,854	140,524,763	140,524,763
Scoured Wool:				
Domestic	4,486,462	5,417,417	9,903,879	
Foreign	7,860,567	8,399,102	16,259,669	
Total	12,347,029	13,816,519	26,163,548	52,327,096
Pulled Wool:				
Domestic	8,643,488	2,146,134	10,789,622	
Foreign	1,571,393	3,086,414	4,657,807	
Total	10,214,881	5,232,548	15,447,429	20,596,569
Total grease, scoured and pulled				213,448,428
Tops	1,422,124	10,395,068	11,817,192	23,634,384
Noils	5,104,365	12,385,449	17,489,814	34,979,628
Total grease equivalent of all wool reported				272,062,440

In its report of wool stocks on hand December 31, 1918, the Department reduces only the scoured wool and the pulled wool to the grease basis. These sums added to the quantity of grease wool reported make the total grease, scoured, and pulled wool on the grease basis 213,448,428 pounds, which is practically the amount used by the Department in its calcula-

tions. In previous statements the National Association of Wool Manufacturers, in addition to the calculation just named, has also estimated the equivalent of grease wool required to produce the tops and noils held by dealers and manufacturers at the several dates. This practice has been continued, and shows in the table that the equivalent in grease of the tops was 23,634,384, and of noils 34,979,628 pounds, these being estimated at the same rate of shrinkage which the Department uses; namely, 50 per cent or two pounds of grease wool for one pound of scoured. These two sums added to the quantity reported by the Department of Agriculture make the total grease equivalent of all wool reported in the hands of dealers and manufacturers 272,062,440 pounds.

The following statement shows the stocks of wool on hand held by dealers and manufacturers, at the dates named, reduced to the grease basis, and including, as above, the equivalent of the tops and noils reported as on hand:

June	30, 1917.....	566,249,298 pounds.
September	30, "	621,125,402 "
December	31, "	544,977,318 "
March	31, 1918.....	427,119,677 "
June	30, "	494,683,960 "
September	30, "	463,685,332 "
December	31, "	272,062,440 "

It will be seen that the stock of wool held by dealers and manufacturers has been very much reduced during the year, in fact being only about half the quantity held by them one year previously. On December 31, 1917, the total so held was 545,000,000 pounds. On December 31, 1918, one year later, it had become reduced to 272,000,000 pounds. This quantity, however, does not represent all the wool in the country at the later date. The Department of Agriculture, in connection with the Quartermaster Department, estimated the total supply of grease, pulled, and scoured wool held by the Government, and by dealers and manufacturers, at 460,000,000 pounds.

WOOL HELD BY THE UNITED STATES GOVERNMENT,
MARCH 29, 1919.

According to an official announcement of the War Department, the stocks of wool in the hands of the Government Wool Administration on March 29, 1919, were as follows:

	Pounds.
Greasy combing wools	98,056,000
Tops	2,322,000
Greasy carding wool.....	109,508,000
Scoured wool	28,530,000
Greasy sundries	687,000
Total	<u>239,103,000</u>
Carpet wool (including 855,000 pounds Iceland wool).....	<u>23,923,000</u>
* Total in distributors' hands March 29, 1919	<u>263,026,000</u>

Not included in the above stocks are 300,000 bales of Australasian wool bought last fall from the British Government. Arrangements had been made for the shipping of this wool, when the armistice was signed, sufficient to move 100,000 bales of these wools, and these 100,000 bales are being brought forward. Negotiations are still proceeding with a view to securing the consent of the British Government to cancel the purchase of the remaining 200,000 bales.

In addition to the 300,000 bales of Australasian referred to, which are not included in the Government wool stocks as of March 29, 1919, there was a quantity of wool in the process of passing from the Wool Purchasing Quartermaster to the Government Wool Distributer, the amount of which cannot be stated with exactness at this time, but it is estimated to be in the neighborhood of 20,000,000 pounds. It is not thought that this additional quantity will materially change the character of the stocks, as shown by the analysis of the 263,000,000 pounds which follows:

* The scoured wool and top if reduced to the greasy basis would equal 61,704,000 pounds and would increase the total quantity reported, not including wool held by dealers and manufacturers, to 293,878,000 pounds.

GREASY COMBING WOOL. (000 OMITTED.)

Origin.	Fine.	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{1}{4}$	Low $\frac{1}{4}$.	Low.	Total.
Australian	28,560	. . . .	. . . .	. . . .	. . . .	. . . .	28,560
Cape	3,930	. . . .	. . . .	. . . .	. . . .	. . . .	3,930
South American	2,536	2,861	5,014	8,151	2,949	11,053	32,564
Foreign, pulled	25	. . . .	. . . .	103	338	1,507	2,007
Domestic, pulled	11	23	31	428	222	118	833
Territory	1,388	9,326	7,868	722	1,803	1,293	22,400
Texas and California	95	. . . .	. . . .	. . . .	. . . .	. . . .	95
Fleeces	2,605	221	2,949	1,153	388	411	7,727
Totals	39,090	12,431	15,896	10,557	5,700	14,382	98,056

"Low" classification includes Class 4 wool (6,558,000).

"Low" classification includes 40's and 44's, and below.

GREASY CARDING WOOL. (000 OMITTED.)

Origin.	Fine.	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{1}{4}$	Low $\frac{1}{4}$.	Low.	Total.
Australian	5,020	. . . .	. . . .	. . . .	. . . .	. . . .	5,020
Cape	4,050	. . . .	. . . .	. . . .	. . . .	. . . .	4,050
South American	950	306	1,004	12,000	3,912	6,894	25,066
Foreign, pulled	198	203	223	623	628	750	2,625
Domestic, pulled	194	472	902	2,225	790	324	4,907
Territory	23,735	5,875	5,876	1,436	101	14	46,040
Texas and California	11,300	. . . .	. . . .	. . . .	. . . .	. . . .	11,300
Fleeces	1,585	1,145	3,304	4,066	. . . .	. . . .	10,100
Totals	56,432	8,004	11,309	20,350	5,431	7,982	109,508

"Low" classification includes 4's carding wool (5,840,000).

"Low" classification includes 40's and 44's, and below.

SCOURED WOOL. (000 OMITTED.)

Origin.	Fine.	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{1}{4}$	Low $\frac{1}{4}$.	Low.	Total.
* Scoured wool	8,736	3,394	2,992	4,981	1,666	6,783	28,530

Included in "low," are 40's and 44's (about 6,130,000 pounds).

TOPS. (000 OMITTED.)

Origin.	Fine.	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{1}{4}$	Low $\frac{1}{4}$.	Low.	Total.
*	85	249	507	406	752	323	2,322

* See footnote, page 174.

WOOL CONSUMPTION BY MONTHS.

The reports of the Department of Agriculture covering all of 1918, except the month of December, which appeared in the preceding numbers of the Bulletin, are here continued, making a complete statement for the year. The percentages used by the Department in reducing the scoured and pulled wools differ somewhat from those heretofore used by this office, and in order that uniformity may prevail the Department's ratios are used for the December report which follows, and will be used in subsequent reports.

DECEMBER, 1918.

Schedules sent to 560 establishments.

5 having 31 sets of cards and 10 combs reported too late for tabulation;

3 reported as using only tops, yarns, and wastes;

88 reported as using no wool;

464 reported wool used as follows:

			In Grease.
In grease.....	25,639,625 pounds	=	25,639,625 pounds.
Scoured.....	5,529,884 "	=	11,059,768 "
Pulled	1,185,572 "	=	1,580,763 "
<hr/>			
Total	32,355,081 "	=	38,280,156 "

This completes the monthly record of wool consumption in the American mills for the year 1918. From these statements it appears that the grand totals of wool used during the year were as follows:

			In Grease.
In the grease	451,443,634 pounds	=	451,443,634 pounds.
Scoured	127,982,971 "	=	255,965,942 "
Pulled	25,731,416 "	=	34,308,555 "
<hr/>			
Total	605,158,021 "	=	741,718,131 "

This total covers, according to the Department, fully 99 per cent of all the wool used in the wool manufacture in the United States.

WOOL CONSUMED IN THE UNITED STATES WOOL MANUFACTURE DURING THE YEAR, 1918.

The following statement shows the consumption of wool in the United States during the year 1918 as ascertained monthly by the Federal Department of Agriculture. These reports have been printed in the Bulletin regularly, as soon as possible after publication by the Department. Their combination into a yearly report is of great value and interest. As prepared by the Department the quantities were given as reported in grease and scoured and pulled wool only. The two latter not being reduced to the greasy equivalent by the Department have been so reduced in this office and the necessary amount added. The actual quantity of wool in the grease equals 741,718,131 pounds, which makes the table readily comparable with the official statistics of imports and production of wool.

The imports of wool for the calendar year were 453,727,372 pounds, and the domestic production 299,921,000 pounds, making a total for the year of 753,648,372 pounds, or only 12,000,000 pounds in excess of the quantity consumed by the mills, which reduced to the greasy equivalent was 741,718,131 pounds.

The quantity of wool held by dealers and manufacturers in the United States reported by the Department of Agriculture December 31, 1917, reduced to the grease equivalent, was 544,977,318 pounds, and on December 31, 1918, one year later, 272,062,440 pounds. The wool-purchasing quartermaster reports that on December 28, 1918, the total stock of wool in Government possession was 313,746,502 pounds. After making allowance for wool held privately and not yet billed to the Government, the Department estimates the total of grease, scoured, and pulled wool (not reduced to the grease basis) at 460,000,000* pounds. As no figures for scoured and pulled wool are given no modification of the quantity named is possible on that account, although the greasy equivalent would doubtless show much larger figures.

* A later statement by the Quartermaster Department (March 29, 1919, page 174) indicates a large reduction in the quantity of wool held by the authorities.

In addition to the above the Department reports the stocks of hair, bristles, etc., on hand December 31, 1918, from which it appears that the quantity of alpaca, mohair, camel hair, and cashmere goat hair so held was 14,237,595 pounds.

It also reports the consumption of these hairs in the six months preceding to have been 5,201,096 pounds, used in the manufacture of yarns, press cloths, plushes, cloakings, and similar goods.

THE UNITED STATES DEPARTMENT OF AGRICULTURE'S REPORT OF WOOL CONSUMED, IN POUNDS, FROM JANUARY 1 TO DECEMBER 31, 1918.

Class and Grade.		Grease.	Scoured.	Pulled.	Totals.
<i>Fine:—</i>					
Combing:	Domestic	48,963,791	428,731	1,536,973	50,929,495
	Foreign	51,349,274	1,133,685	207,266	52,690,225
Clothing:	Domestic	7,193,535	5,986,888	1,159,385	14,339,808
	Foreign	7,145,148	8,829,438	353,674	16,328,260
$\frac{1}{2}$ <i>Blood:—</i>					
Combing:	Domestic	40,644,147	2,548,261	2,661,582	45,853,990
	Foreign	32,485,354	1,065,356	427,021	33,977,731
Clothing:	Domestic	4,476,118	5,508,164	1,762,535	11,746,817
	Foreign	2,275,874	4,422,833	293,062	6,991,769
$\frac{3}{4}$ <i>Blood:—</i>					
Combing:	Domestic	34,930,801	4,789,735	3,778,397	43,498,933
	Foreign	25,624,276	4,316,680	173,286	30,114,242
Clothing:	Domestic	3,083,162	9,054,408	3,129,048	15,266,618
	Foreign	3,157,167	6,638,218	979,938	10,775,323
$\frac{1}{4}$ <i>Blood:—</i>					
Combing:	Domestic	34,596,327	2,867,804	1,921,580	39,385,711
	Foreign	67,818,749	9,459,257	1,578,567	78,856,573
Clothing:	Domestic	2,717,793	9,384,038	2,366,212	14,468,043
	Foreign	4,400,292	43,822,775	1,199,728	49,422,795
<i>Low or Lincoln:—</i>					
Combing:	Domestic	5,746,697	396,194	77,132	6,220,023
	Foreign	40,292,414	644,746	297,744	41,234,904
Clothing:	Domestic	370,224	534,826	81,129	986,179
	Foreign	372,079	1,136,118	94,044	1,602,241
<i>Carpet:—</i>					
Combing:	Foreign	16,413,446	1,176,107	177,527	17,767,080
Filling:	Foreign	15,703,053	2,777,608	1,277,312	19,757,983
<i>Grade Not Stated:—</i>					
	Domestic	1,513,618	586,182	78,057	2,177,857
	Foreign	170,295	474,919	120,217	765,431
Totals:					
	Domestic	184,236,213	42,085,231	18,552,030	244,873,474
	Foreign	267,207,421	85,897,740	7,179,386	360,284,547
GRAND TOTALS		451,443,634	127,982,971	25,731,416	605,158,021

COMPARISON BY STATES OF WOOL CONSUMED, IN POUNDS, FROM JANUARY 1
TO DECEMBER 31, 1918.

It is estimated that the combined totals of grease, scoured, and pulled wool is equivalent to about 740,000,000 pounds of grease wool.

(The grease equivalent and the percentages estimated by the National Association of Wool Manufacturers.)

State.	Grease.	Scoured.	Pulled.	Totals.	Per Cent of Total.
Massachusetts	208,630,967	53,054,741	6,211,604	267,897,312	44.28
(Grease equivalent)		106,109,482	8,282,139	323,022,588	43.54
Pennsylvania	63,277,130	9,007,819	4,167,065	76,452,014	12.63
(Grease equivalent)		18,015,638	5,556,087	86,848,855	11.71
Rhode Island	57,961,196	4,594,409	4,613,199	67,168,804	11.10
(Grease equivalent)		9,188,818	6,150,932	73,300,946	9.88
New Jersey	59,106,090	3,049,913	922,376	63,078,379	10.42
(Grease equivalent)		6,099,826	1,229,835	66,435,751	8.96
New York	26,979,370	11,418,282	2,239,628	40,637,280	6.70
(Grease equivalent)		22,836,564	2,986,171	52,802,105	7.12
Connecticut	6,709,014	9,551,352	2,525,167	18,785,533	3.10
(Grease equivalent)		19,102,704	3,366,889	29,178,607	3.93
New Hampshire	2,988,166	14,785,010	843,749	18,616,925	3.10
(Grease equivalent)		29,570,020	1,124,999	33,683,185	4.54
Ohio	14,138,279	484,400	485,822	15,108,501	2.50
(Grease equivalent)		968,800	647,763	15,754,842	2.12
Maine	2,850,829	6,612,569	951,123	10,414,526	1.72
(Grease equivalent)		13,225,138	1,268,171	17,344,138	2.34
Totals for above	442,641,041	112,558,495	22,959,738	578,159,274	95.55
(Grease equivalent)		225,116,990	30,612,984	698,371,015	14.12
Other States	8,802,593	15,424,476	2,771,678	26,998,747	4.45
(Grease equivalent)		30,548,952	3,695,571	43,347,116	5.88
Grand Totals	451,443,634	127,982,971	25,731,416	605,158,021	100.00
(Grease equivalent)		255,965,942	34,308,555	741,718,131	100.00

An extension of the figures furnished by the Department shows the percentage of the total of wool used in each of the principal wool-manufacturing States. The relative importance in quantity used — the wool being reduced to the grease basis — is as follows :

Massachusetts	43.54	New Hampshire	4.54
Pennsylvania	11.71	Connecticut	3.93
Rhode Island	9.88	Ohio	2.12
New Jersey	8.96	Maine	2.34
New York	7.12	All other	5.88

100.00

From these percentages it appears that the five New England States named consumed 64.23 per cent of the total used, the three Middle States 27.79 per cent, while all the rest of

the country used only 7.98 per cent. Massachusetts alone consumed as much wool as Rhode Island, Connecticut, Maine, and the three Middle States combined. "All other" States outside of the nine named used very little more than the two States Connecticut and Ohio.

The table illustrates how completely the wool manufacture of the country is centered in New England and the three Middle States and is confirmatory of the statistics of the reports on manufactures of the Census Bureau.

WOOL CONSUMPTION IN 1919.

Below we begin the record of wool consumption in the United States as reported by the Department of Agriculture for the year 1919.

JANUARY, 1919.

Schedules sent to 569 establishments.

5 having 31 sets of cards and 10 combs reported too late for tabulation;
 11 reported as using only tops, yarns, and wastes;
 121 reported as using no wool;
 432 reported wool used as follows:

			In Grease.
In grease.....	26,101,046 pounds	=	26,101,046 pounds.
Scoured.....	5,281,878 "	=	10,563,756 "
Pulled	1,191,046 "	=	1,588,062 "
Total	32,573,970 "	=	38,252,864 "

FEBRUARY, 1919.

Schedules sent to 579 establishments.

6 having 54 sets of cards and 5 combs reported too late for tabulation;
 8 reported as using only tops, yarns, and wastes;
 144 reported as using no wool;
 421 reported wool used as follows:

			In Grease.
In grease.....	17,772,920 pounds	=	17,772,920 pounds.
Scoured.....	3,467,457 "	=	6,934,914 "
Pulled	1,946,441 "	=	2,595,255 "
Total	23,186,818 "	=	27,303,089 "

ACTIVE AND IDLE MACHINERY AS OF JANUARY 2, FEBRUARY 1, AND MARCH 1, 1919.

STATISTICS GATHERED BY THE BUREAU OF MARKETS,
UNITED STATES DEPARTMENT OF AGRICULTURE.

January 2, 1919.

Summary of Reports of 927 Manufacturers.

	Looms.			Sets of Cards.	Combs.	Spinning Spindles.	
	Wider than 50 inch Reed Space.	Under 50 inch Reed Space.	Carpets and Rugs.			Woolen.	Worsted.
In Operation . .	35,925	12,953	2,835	4,276	1,603	1,343,919	1,434,808
Idle	24,262	6,254	5,450	2,036	710	771,277	860,386
Total	60,187	19,207	8,285	6,312	2,313	2,115,196	2,295,194

Percentage of Idle Machinery to Total Reported.

Jan. 2, 1919 . . .	40.3	32.6	65.8	32.2	30.7	36.5	37.5
Dec. 2, 1918 . . .	22.5	24.9	58.	13.8	17.8	16.1	27.4
Nov. 1, 1918 . . .	21.1	26.8	52.8	11.1	23.8	11.9	30.1

Number of Machines in Operation.

Jan. 2, 1919:							
Single shift,	85,407	12,951	2,810	3,960	1,315	1,234,032	1,370,124
Double shift,	518	2	25	316	288	109,887	64,684
Dec. 2, 1918:							
Single shift,	44,528	14,603	2,558	4,976	1,546	1,588,242	1,564,781
Double shift,	1,377	2	43	519	323	161,204	81,260
Nov. 1, 1918:							
Single shift,	44,724	13,919	3,413	4,980	1,642	1,626,205	1,489,852
Double shift,	2,258	146	53	767	356	284,432	88,040

Percentage on Government Orders to Total in Operation.

Jan. 2, 1919:							
Single shift,	33.1	5.9	6.7	22.7	9.	25.3	13.5
Double shift,	.7	. . . . .	. . . . .	1.6	2.2	1.5	1.
Dec. 2, 1918:							
Single shift,	55.4	17.9	12.7	48.8	24.8	46.5	44.6
Double shift,	2.3	. . . . .	1.5	5.2	6.7	4.3	2.7
Nov. 1, 1918:							
Single shift,	57.5	17.5	16.6	52.7	52.4	53.1	59.
Double shift,	3.7	.6	1.4	10.3	15.8	10.8	5.5

Schedules were sent to 1027 Wool Textile manufacturing concerns. In addition to the reports tabulated above, 23 concerns replied stating that their equipment consisted of machinery not listed on the schedule, and reports had not been received from 77 concerns at the time the compilation was completed.

February 1, 1919.

Summary of Reports of 924 Manufacturers.

	Looms.			Sets of Cards.	Combs.	Spinning Spindles.	
	Wider than 50 inch Reed Space.	Under 50 inch Reed Space.	Carpets and Rugs.			Woolen.	Worsted.
In Operation . .	28,109	12,390	2,437	3,685	1,399	1,201,939	1,183,906
Idle	30,792	8,806	4,640	2,294	925	855,566	1,120,005
Total	58,901	21,196	7,077	5,979	2,324	2,057,505	2,303,911

Percentage of Idle Machinery to Total Reported.

Feb. 1, 1919 . . .	52.3	41.5	65.6	38.7	39.8	41.1	48.6
Jan. 2, 1919 . . .	40.3	32.6	65.8	32.2	30.7	36.5	37.5
Dec. 2, 1918 . . .	22.5	24.9	58.	13.8	17.8	16.1	27.4
Nov. 1, 1918 . . .	21.1	26.8	52.8	11.1	23.8	11.9	30.1

Number of Machines in Operation.

Feb. 1, 1919:							
Single shift,	27,702	12,389	2,402	3,412	1,138	1,109,360	1,107,878
Double shift,	407	1	35	273	261	92,579	76,028
Jan. 2, 1919:							
Single shift,	35,407	12,951	2,810	3,960	1,315	1,234,032	1,370,124
Double shift,	518	2	25	316	288	109,887	64,684
Dec. 2, 1918:							
Single shift,	44,528	14,603	2,558	4,976	1,546	1,588,242	1,564,781
Double shift,	1,377	2	43	519	323	161,204	81,260
Nov. 1, 1918:							
Single shift,	44,724	13,919	3,413	4,980	1,642	1,626,205	1,489,852
Double shift,	2,258	146	53	767	356	284,432	88,040

Percentage on Government Orders to Total in Operation.

Feb. 1, 1919:							
Single shift,	9.4	2.4	.3	8.1	3.7	8.2	1.8
Double shift,	.2	. . . . .	. . . . .	.6	2.8	.8	. . . . .
Jan. 2, 1919:							
Single shift,	33.1	5.9	6.7	22.7	9.	25.3	13.5
Double shift,	.7	. . . . .	. . . . .	1.6	2.2	1.5	1.
Dec. 2, 1918:							
Single shift,	55.4	17.9	12.7	48.8	24.8	46.5	44.6
Double shift,	2.3	. . . . .	1.5	5.2	6.7	4.3	2.7
Nov. 1, 1918:							
Single shift,	57.5	17.5	16.6	52.7	52.4	53.1	59.
Double shift,	3.7	.6	1.4	10.3	15.8	10.8	5.5

Of the machinery reported in operation, 4% of the Broad Looms, 14% of the Narrow Looms, 7% of the Cards, 5% of the Combs, 7% of the Woolen Spindles, and 7% of the Worsted Spindles were running 40 hours or less per week. Schedules were sent to 1004 Wool Textile manufacturing concerns, of whom 9 stated that their equipment consisted of machinery not listed, and reports from 71 concerns had not been received at the time compilation was completed.

March 1, 1919.

Summary of Reports of 907 Manufacturers.

	Looms.			Sets of Cards.	Combs.	Spinning Spindles.	
	Wider than 50 inch Reed Space.	Under 50 inch Reed Space.	Carpets and Rugs.			Woolen.	Worsted.
In Operation . .	25,313	11,364	2,662	3,771	1,210	1,213,396	1,062,778
Idle	35,098	8,367	4,227	2,417	1,109	870,605	1,186,187
Total	60,411	19,731	6,889	6,188	2,319	2,084,001	2,248,965

Percentage of Idle Machinery to Total Reported.

March 1, 1919 . .	58.1	42.4	61.4	39.1	47.8	41.8	52.7
Feb. 1, 1919 . . .	52.3	41.5	65.6	38.7	39.8	41.1	48.6
Jan. 2, 1919 . . .	40.3	32.6	65.8	32.2	30.7	36.5	37.5
Dec. 2, 1918 . . .	22.5	24.9	58.	13.8	17.8	16.1	27.4
Nov. 1, 1918 . . .	21.1	26.8	52.8	11.1	23.8	11.9	30.1

Number of Machines in Operation.

March 1, 1919:							
Single shift,	24,969	11,364	2,613	3,510	1,040	1,147,912	1,028,190
Double shift,	344	. . . . .	49	261	170	65,484	34,588
Feb. 1, 1919:							
Single shift,	27,702	12,389	2,402	3,412	1,138	1,109,360	1,107,878
Double shift,	407	1	35	273	261	92,579	76,028
Jan. 2, 1919:							
Single shift,	35,407	12,951	2,810	3,960	1,315	1,234,032	1,370,124
Doubleshift,	518	2	25	316	288	109,887	64,684
Dec. 2, 1918:							
Single shift,	44,328	14,603	2,558	4,976	1,346	1,588,242	1,564,781
Double shift,	1,577	2	43	519	323	161,204	81,260
Nov. 1, 1918:							
Single shift,	44,724	13,919	3,413	4,980	1,642	1,626,205	1,489,852
Double shift,	2,258	146	53	767	356	284,432	88,040

Percentage on Government Orders to Total in Operation.

March 1, 1919:							
Single shift,	4.2	2.4	. . . .	4.1	.4	5.7	.4
Double shift,	.1	. . . . .	. . . .	.6	. . . .	.5	. . . .
Feb. 1, 1919:							
Single shift,	9.4	2.4	.3	8.1	5.7	8.2	1.8
Double shift,	.2	. . . . .	. . . .	.6	2.8	.8	. . . .
Jan. 2, 1919:							
Single shift,	33.1	5.9	6.7	22.7	9.	25.3	13.5
Double shift,	.7	. . . . .	. . . .	1.6	2.2	1.5	1.
Dec. 2, 1918:							
Single shift,	55.4	17.9	12.7	48.8	24.8	46.5	44.6
Double shift,	2.3	. . . . .	1.5	5.2	6.7	4.3	2.7
Nov. 1, 1918:							
Single shift,	57.5	17.5	16.6	52.7	52.4	53.1	59.
Double shift,	3.7	.6	1.4	10.3	15.8	10.8	6.5

Of the machinery reported in operation, 3% of the Broad Looms, 17% of the Narrow Looms, 6% of the Cards, 3% of the Combs, 9% of the Woolen Spindles, and 4% of the Worsted Spindles were reported running 40 hours or less per week. Schedules were sent to 992 Wool Textile manufacturing concerns. In addition to the reports tabulated above, 13 concerns replied stating that the schedule did not apply to their machinery, and reports from 70 concerns had not been received at the time compilation was completed.

CHARLES J. BRAND,
Chief of Bureau.

Percentage of Idle Machinery to Total Reported. Thirteen months to March 1, 1919.

	Looms.			Sets of Cards.	Combs.	Spinning Spindles.	
	Wider than 50 inch Reed Space.	Under 50 inch Reed Space.	Carpets and Rugs.			Woolen.	Worsted.
March 1, 1919* .	53.1	42.4	61.4	39.1	47.8	41.8	52.7
Feb. 1, 1919* .	52.3	41.5	65.6	38.7	39.8	41.1	48.6
Jan. 2, 1919* .	40.3	32.6	65.8	32.2	30.7	36.5	37.5
Dec. 2, 1918* .	22.5	24.9	58.	13.8	17.8	16.1	27.4
Nov. 1, " * .	21.1	26.8	52.8	11.1	23.8	11.9	30.1
Oct. 1, " . .	18.3	24.3	40.	9.3	12.5	8.8	18.8
Sept. 2, " . .	13.8	15.1	36.8	7.	13.2	8.3	20.2
Aug. 1, " . .	12.2	14.3	34.	6.	10.2	6.6	15.3
July 1, " . .	10.4	10.2	30.2	5.9	10.5	6.5	13.2
June 1, " . .	8.6	11.9	33.2	5.5	15.	7.	14.
May 1, " . .	7.9	8.3	31.	5.3	8.6	5.4	12.7
April 1, " . .	7.1	8.5	34.4	4.2	8.8	5.	12.5
March 1, " . .	8.2	8.	31.	4.6	8.3	5.5	12.7

* The percentages of the Bureau of Markets are not strictly comparable with those of the National Association of Wool Manufacturers because of the difference in method of gathering and tabulating the statistics.

Obituary.

HON. ERNEST M. GOODALL.

HON. ERNEST MONTROSE GOODALL, a distinguished member of a distinguished family of American manufacturers, died in Miami, Florida, at his winter home on January 29, 1919. Mr. Goodall had been not only an active manufacturer but a leader in public affairs, and he had crowded a remarkable amount of achievement into a busy lifetime.

Mr. Goodall, the youngest son of Thomas and Ruth Goodall, was born in Troy, New Hampshire, on August 15, 1853. When his father established in Sanford, Maine, the industries which have made the family name so honored, Ernest Goodall was associated with the enterprise and soon became the superintendent of the Sanford Mills. With courage and originality the Goodalls had embarked upon an almost untried branch of the textile manufacture in this country—the making of mohair car and furniture plushes, carriage robes, etc. On the retirement of the senior Goodall, Mr. Ernest M. Goodall became president of the Sanford Mills Company, a responsible post which he retained to the time of his death. Mr. Goodall was also one of the founders and directors of the Goodall Worsted Company of Sanford.

Directing with much success his own affairs, Mr. Goodall also took a leading place in the public business of Sanford and of the State of Maine. He was again and again selectman of his town, and had a most creditable career in the Maine House of Representatives, the Maine Senate, and the Executive Council. He was a devoted Republican and protectionist, acting as chairman of the local and county Republican organizations and also as a member of the State Committee of Maine. He always delighted in outdoor sports, particularly in yachting, and he was one of the patriotic owners that placed their seagoing pleasure craft at the disposal of the Government on our entrance into the great world war.

Mr. Goodall took a leading part in the organization of the Sanford Water Company, the Sanford Trust Company, the Maine Alpaca Company, the Sanford Power Company, the Holyoke Plush Company, the Atlantic Shore Railway, and other corporations, in most of which he served as president. He was a man of notably generous impulses, and his good deeds, of which he was always averse to speak, will be long and gratefully remembered. Two other members of this famous family are Hon. Louis B. Goodall, who represents the Thomas B. Reed district in the National House of Representatives, and Hon. George B. Goodall, both of Sanford, Maine.

Editorial and Industrial Miscellany.

A BRIGHTER TRADE OUTLOOK.

TRANSITION FROM WAR TO PEACE PROCEEDING FAVORABLY IN SPITE OF LABOR DIFFICULTIES.

THE month of April finds the American wool manufacture rapidly adjusting itself to the conditions of peace. When the state of war was suddenly and unexpectedly suspended by the armistice of November 11, 1918, it was recognized that a difficult period lay ahead of the textile mills whose production had been so largely diverted to military and naval uses. It was necessary for the Government immediately to curtail its war business in the interest of national economy. Manufacturers in general have met the Government half way in a spirit of loyalty and good will, even though some of the terms insisted upon have proved very onerous.

The first immediate result was an unprecedented amount of unemployment in the wool manufacture of this country. When the armistice was agreed to, fully 50 per cent on the average of the productive machinery of this industry was working on government account, and many concerns had 70 or 80 per cent of their equipment thus employed. When government contracts were suddenly curtailed or cancelled this inevitably meant a shutting down of machinery which could not immediately be turned to civilian orders. In fact, until new wool values were established by the action of the Government in disposing by auction of accumulated wool supplies, there was virtually no civilian demand. For weeks this trade stagnation continued, with the consequence that on February 1, 1919, 52.3 per cent of the wider woolen and worsted looms of this country were idle, 41.5 per cent of the looms under 50 inches, 38.7 per cent of the cards, 39.8 per cent of the combs, 41.1 per cent of the woolen, and 48.6 per cent of the worsted spinning spindles. From that date, however, the wool manufacture has experienced a steady rebound. When wool values were approximately known it was possible to provide a new basis of values for woolen and worsted yarns and fabrics, and this price revision was so satisfactory to the trade that in March and April a substantial and even an eager business developed from the principal customers of the woolen and worsted mills.

Still further encouragement was given to manufacturing when in the latter part of March Mr. A. W. Elliott of the Wool Administration announced that the Government would meet the reduction of an average of $7\frac{1}{2}$ per cent which the British government planned to make on April 1 on its basic prices of government-owned wools. Meanwhile, however, desirable wools offered at government wool auctions in the United States had shown an upward tendency not in accord with the new prices that had been established on woolen goods.

The dominant feeling in the wool manufacture to-day is one of reasonable confidence for the immediate future. For one thing, there is no excessive amount of importations and there is not likely to be until British manufacturers have filled immediate demands from France, Belgium and Holland, Scandinavia and more distant countries, and until the great amount of German wool manufacturing machinery has been put into a position to renew production. This probably will be many months hence, for not only are the Germans understood to be lacking in brass and copper auxiliary parts of their machinery, but stocks of raw materials have become practically exhausted through the blockade that has accompanied the war.

The world over, there is an acute shortage of woolen and worsted fabrics due to the extraordinary demand of the belligerent governments for uniform fabrics for twenty millions of soldiers during the four years of war. In France the production of civilian cloths was necessarily suspended, and in Great Britain wool has only been strictly "rationed" to the mills for civilian purposes. It will take many months of active manufacturing to produce for the world in general an adequate stock of warm and durable fabrics, and for the time being the American market, the best and greatest market in the world, cannot from the nature of things be seriously threatened by foreign competition.

Of course the reduction of the working week from $55\frac{1}{2}$ hours to 48 hours in Great Britain and from 54 hours or 55 hours to 48 hours in the United States will compel a certain lessening of the volume of production. This of itself will for the present tend to make manufacturing more active, though not in the long run more profitable. A considerable amount of production has been lost through the serious strikes at Lawrence and Passaic. As soon as these industrial troubles are entirely adjusted, a period of some months of comfortable activity should lie before the woolen and worsted industry of the United States.

NO MORE RECIPROCITY?

A REPORT OF THE TARIFF COMMISSION AGAINST
SEEKING SPECIAL TRADE ADVANTAGES.

AN end in general to the making of treaties of reciprocity or reciprocal arrangements is the plain recommendation of the United States Tariff Commission in the report which has recently been submitted to the President and to Congress. For some time Chairman Taussig and his colleagues, Messrs. Page, Lewis, Kent, Culbertson, and Costigan, all of whom sign this report, have been employed in a special consideration of reciprocity and commercial treaties. As to the principle governing the most-favored-nation clause, no specific suggestion is made, but Dr. Taussig and the Commission emphatically declare that the United States "should ask no special favors and should grant no special favors, but should exercise its powers and impose its penalties, not for securing discrimination in its favor, but to prevent discrimination to its disadvantage." On the publication of the report Dr. Taussig left for Paris, at the desire of the President, to submit his conclusions to the American Peace Commission in the International Conference.

"An opportunist attitude was natural so long as the United States kept aloof from foreign complications and was intent upon avoiding them," runs the line of the Commission's argument. "Now, however, the situation is completely altered. The United States becomes committed to far-reaching participation in world politics. The American government can no longer shape its commercial negotiations solely with reference to the results of each particular arrangement. It must consider the world at large and must shape its commercial policy in conformity with the political and humanitarian principles which govern its general attitude in the international sphere."

It is urged, furthermore, that the policy of special arrangements which the United States has followed in recent decades inevitably leads to vexatious complications. "Whether as regards our reciprocity treaties or as regards our interpretation of the most-favored-nation clause, the separate and individual treatment of each case tends to create misunderstanding and friction with countries which, though supposed to be not concerned, yet are in reality much concerned. When each country with which we negotiate is treated by itself and separate arrangements are made with the expectation that they shall be applicable individually, claims are none the less made

by other States with whom such arrangements have not been made. Concessions are asked; they are sometimes refused; counter concessions are proposed; reprisal and retaliation are suggested; unpleasant controversies and sometimes international friction result."

A clear and simple policy is advocated for the future: "The guiding principle might well be that of equality of treatment—a principle in accord with American ideals of the past and of the present. Equality of treatment should mean that the United States treat all countries on the same terms, and in turn require equal treatment from every other country. So far as concerns general industrial policy and general tariff legislation, each country—the United States as well as others—should be left free to enact such measures as it deems expedient for its own welfare. But the measures adopted, whatever they be, should be carried out with the same terms and the same treatment for all nations."

Strictly interpreted this principle might forbid the continuance of such a special reciprocal agreement as we have long had with the neighboring republic of Cuba, through which American products are admitted at lower rates of duty to Cuban ports and Cuban tobacco and sugar enjoy a valuable preference in the ports of the United States. This plan has resulted in the development of a great and important commerce and has never been the cause of any considerable friction or misunderstanding. To break off this agreement would be harmful to our country and provocative of disappointment and regret among our Cuban neighbors whom a peculiarly strong bond of mutual interest attaches to the United States.

Strictly interpreted, moreover, the principle outlined by the Tariff Commission would seem to forbid preferential treatment of the commerce of the Philippines, where we have particular responsibilities. There is also at the present time a reciprocal arrangement between the United States and Brazil of much potential value to both countries—though in our case this advantage has been defeated in a large degree by the hostile, discriminatory acts of the European steamship combinations which used to control our carrying trade to Brazil and the entire east coast of South America.

But Professor Taussig and his associates have no idea of being unduly rigid or dogmatic. They frankly recognize that "special political ties and political responsibilities" might justify a degree of reciprocity between the United States and Cuba, for example, or between the United States and Canada, if this were practicable. Such special arrangements, the Commission holds, are not necessarily inconsistent with the general principle of equality of treat-

ment. That is to say, propinquity and sympathetic political relations might justify especial arrangements between the United States and Cuba, though the United States asked no favors and granted none as among the nations of the European continent.

But the members of the Tariff Commission are practical enough to realize that our nation must be armed with the means of defense and reprisal against nations that might endeavor to discriminate against us. "As matters now stand," says the report of the Commission, "the United States has no way of bringing pressure to bear, or rather none that is immediately available. If not accorded equality of treatment by other countries, this country is almost helpless. There has been provided no authorization for action on the part of the Executive. If the United States wishes to exercise pressure on another country for bringing that country's measures into conformity with demands of the United States for equality of treatment, the slow-moving process of legislative enactment alone is now available."

Therefore, the Tariff Commission recommends that under the existing tariff system of the United States the imposing of additional duties in the nature of penalty made applicable to countries which fail to give our country satisfactory treatment would be most effective. The Commission would have the enforcement of additional or punitive tariff duties left to the discretion of the President, in order that prompt and vigorous action may be had—it being understood that the President would act only in conformity with a stated general principle and subject to general limitations defined by statute.

This is a somewhat novel proposition to which in the present temper of opinion it is hardly likely that Congress, the traditional tariff-making body, would agree. But the suggestion and recommendations of the Tariff Commission, based upon a considerable amount of study, deserve the consideration of Congress and the country. This report is one of undoubted usefulness, and will be accepted as such even by those who do not implicitly approve its suggestions and conclusions. We think, however, that it can confidently be taken for granted that such a special, reciprocal arrangement as that existing between this country and Cuba will indefinitely remain in force.

It is altogether probable that if a Republican Congress has the final framing of a successor to the present tariff law it will look with much favor upon a plan of maximum and minimum tariffs—the minimum tariff to be clearly adequate for purposes of both

revenue and protection, and the maximum tariff to be applied to the products of countries whose governments may discriminate against us.

CHANGES OF FOUR YEARS.

THE WOOL MANUFACTURE AND OTHER INDUSTRIES, IN THE REPORT OF THE MASSACHUSETTS BUREAU OF STATISTICS

THE Thirty-second Annual Report of the Bureau of Statistics on Massachusetts manufactures, for the year 1917, has just come to hand. It is much to be regretted that the publication of this valuable report has been so long delayed, but no doubt the delay was unavoidable because of the difficulty of collecting, compiling, and digesting these statistics; always a difficult undertaking and more so in recent years because of the demands made by war exigencies on all manner of business, public as well as private.

A few extracts from this report, relating principally to the wool manufacture, are here reproduced. They confirm the understanding that because of the war's demands, and in spite of other serious drawbacks, this industry in common with others enjoyed an unusual degree of prosperity during the war period.

Speaking of manufactures in general, the report says:

The 32d Annual Report on the Statistics of Manufactures comprising returns from 9,865 establishments, reflects Massachusetts industries undergoing constant changes in equilibrium. Late in the Spring of 1917 the military situation throughout the country became dominant, withdrawing eventually from the State, either through enlistment or draft into the service, some 80,000 men and resulting in a tendency toward partial elimination of industries not absolutely essential to war. The real subtraction of labor from manufacturing industries would approximate one-third of the above number,* and, therefore, before numerical increases or comparisons between years can be considered, due allowance should be made for this numerical loss. Not only was this deficiency of 26,000 wage-earners in 1917 supplied, however, but the grand aggregate for All Industries for the year (708,421) shows a net gain over the previous record year 1916 (682,621), of more than 25,000 wage-earners, and constitutes an addition to our manufactures labor force in 1917 of virtually 51,000 wage-earners, or equivalent to approximately eight per cent.

*Under normal conditions somewhat more than one-third of the wage-earners employed in gainful occupations are engaged in manufacturing industries.

In regard to the wool manufacture it is said:

The machinery in woolen and worsted goods was completely engaged throughout the year in the tremendous task of equipping the army and navy with clothing, including heavy overcoating and blankets required by the Government, without neglecting the extensive demand for fabrics for civilian wear. Obviously the steady increase in wool prices was the main cause of the 50 per cent rise in the totals for the industry as compared with 1916, the product value advancing from \$210,158,989 to \$313,505,980. The increase in the pay roll also had its effect; but in this instance it is apparent that more goods were manufactured in 1917 than in the preceding year, since the average number of wage-earners rose from 57,798 to 59,834, a gain of approximately four per cent. The total cost of materials increased from \$130,398,861 to \$196,401,311, or 50 per cent, and the total pay roll for the year for wage-earners rose from \$34,989,748 to \$44,550,168, or 27.3 per cent.

The following statistical statements are compiled or extracted from the tables given in the report:

AVERAGE NUMBER OF WAGE-EARNERS, 1913 AND 1917, COMPARED.

	Males.	Females.	Total.
Woolen and Worsted Goods:			
1913.....	29,638	20,071	48,709
1917.....	35,141	23,578	58,728
Per cent of increase	18.6	17.5	18.1
Carpets and Rugs:			
1913.....	3,193	2,533	5,726
1917.....	2,284	1,600	3,884
Per cent of decrease.....	28.5	36.8	32.2

	Product.	Materials.	Wages Paid.	Wage-earners.
1913	\$122,495,093	74,770,943	\$24,381,894	50,519
1916	210,158,989	130,398,861	34,989,748	57,798
1917	313,505,980	196,401,311	44,550,168	59,834

In this table felt goods are included.

Another statement gives the average yearly earnings in the wool manufacture to have been 1913—\$481.94; 1917—\$745.26, an increase of 54.6 per cent, while in all industries the increase was 33 per cent over 1913. The earnings equalled an average of \$758.23, indicating that the earnings of the operatives in the wool manufacture were well up to the average of all industries.

The percentages of those earning \$15 and over per week compare with the operatives in the cotton manufacture as follows:

WAGE-EARNERS EARNING OVER \$15 PER WEEK IN 1913 AND 1917.

	Adult Males.	Adult Females.	Under 18 Years of Age.
Woolens and Worsted :			
1913	18.5	2.7	0.1
1917	68.3	35.2	4.8
Cottons :			
1913	11.4	0.3	....
1917	54.5	25.8	3.0

Mr. C. F. Gettemy, the Director of the Bureau of Statistics, makes the following statements which are especially applicable to the wool manufacture:

In view of the many vicissitudes through which our manufacturing industries passed during 1917, it must be said that the remarkable facility with which machinery was adjusted and goods produced in response to the emergency requirements of the war constitutes a high tribute to the enterprise, versatility of resource, and patriotic energy of our Massachusetts manufacturers. Within a few months after the withdrawal of scores of thousands of workers for military service, their replacement so far as numbers were concerned, had been practically accomplished, and by the end of the year more wage-earners were employed in manufacturing than ever before; moreover, the economic betterment of labor during the year, both as to wages and hours, is significant and impressive.

While by no means pessimistic, he looks soberly into the future, recognizing the difficulties and the problems that will confront our industries, in these words:

"With the war restrictions on exports removed and a merchant marine ready at hand to transport American-made products to foreign lands, our great problem will be to so organize and develop our industries and financial system as to be able to compete suc-

cessfully with other nations,—and primarily with that one, Great Britain, which, while in the war to the uttermost, has been so situated as to come out of it not only with lands undevastated and industrial equipment undestroyed, but with the productivity of both tremendously increased and the self-sustaining capacity of the nation, as a result, unquestionably augmented; and this problem may, therefore, turn out to involve not merely the legitimate exploitation of foreign markets for the consumption of a surplus to be created through proper stimulation of output, but the ability of our manufacturers to meet, first, the requirements of domestic consumers in competition with the aggressive foreign exporter.

“With a population of 469 to the square mile, approximately 1,700,000 persons engaged in gainful occupations, of whom over 700,000 are wage-earners in manufacturing industries, with an aggregate net public indebtedness (State, county, municipal, and metropolitan) of \$286,000,000 and State, county and municipal expenditures in 1916 aggregating \$136,000,000, creating problems of taxation of serious magnitude, the people of probably no other state of the Union are living under such intensive economic conditions as are the citizens of Massachusetts; and none, accordingly, are more vitally concerned than they in seeing to it that the readjustments and expansions of the new and historic era upon which the country is entering are accompanied not only by as little present dislocation of industry as possible, but by breadth of vision, foresight and knowledge.”

LARGE STOCKS READY FOR EXPORT.

A TOTAL OF 130,000,000 YARDS OF CLOTH AND DRESS GOODS ON HAND IN THE UNITED KINGDOM.

IN connection with a census of wool stocks in Great Britain, the rather surprising fact has been brought out that in November last there were 80,000,000 yards of cloth on hand in the United Kingdom, of which 27,000,000 yards were held on account of customers abroad. At the end of the year there had accumulated altogether 75,000,000 yards of cloth, 42,000,000 yards of dress goods, and 13,000,000 yards of linings, or a total of 130,000,000 yards of woollen and worsted tissues. This the census enumeration showed, and it showed, moreover, according to the “Wool Chart” of March 6, that in all cases stocks of manufactured goods were larger than on June 30, 1918. Even in worsted yarn there was a stock on hand of 34,000,000

pounds at the end of the year, or an increase of 1,650,000 pounds as compared with June 30, 1918.

"The relative importance of these figures," says the "Wool Chart," commenting on the circumstances, "may be judged from the fact that our total production of woollen and worsted tissues in any one year was in round numbers 400,000,000 yards and of worsted yarn 186,000,000 pounds. These facts emphasize the urgency of the demand for the greatest possible facilities for export trade in fully manufactured goods. Holders of stocks which were bought in a comparatively dear market for export trade are beginning to feel anxious lest the prospect of plentiful supplies of cheaper wool for Allied countries will jeopardize their chance of disposing, without serious loss, of their accumulation of goods. The necessity for keeping a close watch on exports of raw materials and yarns, so long as there is a blockade, is fully understood, but fully manufactured goods are in a different category."

That British manufacturers and merchants had such heavy stocks of cloths and dress goods in their possession after the extraordinary demands of the war emergency is something which would scarcely be credited in America. But they were the facts as officially set forth—very large amounts of goods available for export to the United States or elsewhere at any moment. There is no longer any lack of shipping space. The British government showed itself very forehanded in re-establishing its principal commercial steamship lines immediately after the ending of hostilities. What may probably prevent the shipment of large quantities of British wool manufactures into the American market is the exceptionally keen demand from all other markets of the world. It is reported on reliable authority that France in her urgent need is just now offering higher prices for wool fabrics than are current in the United States, and the same thing is presumably true of Italy, Holland, and Scandinavia.

Throughout the war the British government allowed wool to British manufacturers for the production of goods intended for export, in precedence over goods for home consumption—so solicitous is the United Kingdom to maintain in spite of everything her accustomed markets in foreign lands. It appears that actually more goods were manufactured for export than could be shipped—hence the present accumulation. While it is probable that this accumulation will now be distributed among export markets all over the world, it is possible that British competition will develop in our own American trade somewhat earlier than had been anticipated.

It is all the more desirable, therefore, that an adequate protective tariff should replace the present inadequate, unjust sectional arrangement without any unnecessary delay. If President Wilson sees fit to veto next year a well-considered protectionist measure, a very definite and significant issue will be drawn.

AN OBSERVER IN NORTHERN FRANCE.

MR. EDWIN FARNHAM GREENE'S DESCRIPTION OF THE HAVOC IN FRENCH INDUSTRIES.

FEW American men of business have had the opportunity that came to Mr. Edwin Farnham Greene, president of Lockwood, Greene & Company and treasurer of the Pacific Mills, to survey the battlefields and devastated areas of northern France. Mr. Greene crossed to Paris more than three months ago by invitation of several of the principal French manufacturers, seconded by officials of the French government. His journeys from Paris northward were made in French military automobiles, and though his visit was for business purposes, he saw many of the principal battlefields north of the Marne on his three visits to the front. Mr. Greene did not get into Belgium, however, except for a visit one day to Ypres, but he did have abundant opportunity to survey present conditions of French textile and other manufacturing.

At the annual dinner of Lockwood, Greene & Company in Boston, March 13, Mr. Greene delivered an address describing his experiences. He found coal still very scarce in France—a circumstance that is ominous, for the destroyed mines of northern France cannot be started again in full for several years. He saw the Lille district in the middle of December, only a few weeks after the invading armies had withdrawn. The atmosphere of war was still heavy over the whole region. Military chauffeurs in uniform drove the French car in which he traveled, and two rifles ready for action formed a part of its equipment. The roads were hazardous; breakdowns were frequent, and Frenchmen, in explanation of these mishaps, would say from time to time, "All machinery in France is tired!"

Mr. Greene found Amiens badly shelled and damaged, though the cathedral was virtually unharmed. He saw not three or four lines of trenches but forty or fifty stretching over the country between Paris and the front—and he was told that it would take 300,000

men a year to fill up those excavations. From Albert up to Douai on the Somme front all was desolation—just like a desert, no trees left. “And that, of course,” said Mr. Greene, “impresses anyone who has traveled through other parts of France and knows of the roads lined with beautiful regular rows of trees and hedges and other features that break the monotony of the landscape—but now there is nothing left but this utterly desolate stretch of prairie.”

Everywhere along the roads Mr. Greene found, even weeks after the German retreat, enormous quantities of ammunition—loaded shells, hand grenades, and all kinds of explosives which the German prisoners were slowly carting away. Over the destroyed farms and villages a new green grass or weed was growing. Most of the inhabitants had long before been driven out. There was no one left in the war zone without a permit. The people who used to live in the devastated district were eager to return but there was no food to support them.

In Arras, a city of 40,000 before the war, where only a few hundred are left, Mr. Greene found the large cathedral in ruins. However Lille, like Roubaix and Tourcoing, was practically unharmed, though all brass and copper materials, wool mattresses and fabrics had been removed to Germany. In Chateau-Thierry Mr. Greene saw relatively little destruction, and it gave him a thrill to face the bridge where American machine gunners met and turned back the German invaders at the Marne. Rheims, before the war a city of more than 100,000 people, almost as large as Worcester, Mr. Greene found in a state of almost complete destruction, except that the famous cathedral of which so much has been said was relatively little injured, though the German front-line trenches lay only three miles away. Mr. Greene believes that there could have been no deliberate purpose to destroy this splendid monument of medieval architecture.

Though Lille, Roubaix, and Tourcoing suffered small general damage, the industrial plants had been made special targets of hostile spoliation. At Perenchies was the largest flax spinning plant in France, so completely ruined that \$7,000,000 will be required to replace it. In a great combing plant there stood a battery of 9.2-inch howitzers of the British army. Mr. Greene inspected the largest woolen mill in France. Though the buildings had not been razed, every particle of machinery had been stolen. The largest dyehouse in France had been partially destroyed by a bomb, and as all the machinery had been carried off it would take at least two years to put it into running condition.

Mr. Greene states that as near as can be estimated there were about 500,000 buildings in the devastated area that were seriously

damaged and 250,000 that were totally destroyed. Every bridge through the whole district was blown up—the North Railroad alone losing 1,100 bridges besides 338 stations and four tunnels, while the East Railroad lost 410 bridges, 400 buildings, and ten tunnels. At the time of Mr. Greene's visit the railroad situation was exactly as the departing Germans had left it. "Here and there a single track road has been built around the destroyed parts, but practically throughout that whole devastated district transportation facilities do not exist. Not only have they lost their mines in that whole district, but it will take months and months before there are any means of carrying raw material and coal to the mills."

War damages to all industries, public works, etc., in northern France have been reported to the Chamber of Deputies as amounting to \$13,000,000,000. Mr. Greene states that about 30 per cent of the cotton and wool machinery of France and about 90 per cent of the flax spinning machinery had been totally destroyed. It is estimated that 500,000 men would be required for twenty years to restore northern France to its previous condition.

THE AUSTRALASIAN SEASON OF 1917-18.

IMPORTANT WOOL RECORDS AGAIN AVAILABLE BY THE LIFTING OF THE CENSORSHIP.

AMONG the many inconveniences resulting from the war has been one which though in itself not of primary importance yet has had results far reaching in their effect, which will leave deficiencies in their train that it will be well nigh impossible to make up. One of these is the censorship of publications, and the particular hardship resulting from this source is the destruction of the continuity of statistical statements which have been of great value. It is a pleasure to know that the severity of this censorship has been somewhat relaxed.

For many months past wool dealers in London have been forbidden by the British Government to issue their usual statements respecting the course of the wool market. It is hoped that with the resumption of the London wool sales these will be renewed. One of the most valuable of these reports is Dalgety & Company's Annual Wool Review of the Australian wool trade. It has been a

serious deprivation to be debarred from the receipt of this valuable report, which always contained comprehensive reviews of the sheep and wool markets of the various Australian States and of the Dominion of New Zealand. It is, therefore, with great pleasure that we welcome the reappearance of this Review covering the season of 1917-18, which has just come to hand. A number of valuable statements have been displaced by matters of paramount interest relating to the war and its conduct, particularly the operations of the Australian government, and the various committees appointed under its authority to conserve the wool supply of the Empire. Doubtless in future issues many of the features which have made the Review so valuable and attractive will be reinstated. However that may be, there is very much in the current number which is of exceeding value, and it is with pleasure that we present various extracts covering some of the principal points of the present publication, as follows:

The 1917-18 Australasian statistical wool year, that closed on June 30, was the first season in the history of the wool trade, when the entire production of greasy and scoured wool was disposed of to one purchasing authority, at a flat rate, and the first season that every clip was realised at the seat of production. There was not a bale of raw wool exported first hand for sale to London, or any over-ocean market; the only wool exported was to the order of the British Government for its own use, for sale on Imperial account, or allocated to our Allies. It will be remembered that during the first four to five months of the 1916-17 season wool was sold and shipped in the ordinary way; it was disposed of by auction and private treaty in the Commonwealth, under the rules of the trade, arranged by associations of wool brokers and buyers in the principal wool-selling centres. Some wools were shipped to London for realisation. There was an open market, subject to certain embargoes on export to enemy countries and also to some neutrals. Thus the previous season differed in several material respects from the statistical wool year that followed.

On November 23, 1916, the memorable proclamation was gazetted, prohibiting the sale of wool in the Commonwealth, except under regulations, to be afterwards issued under the War Precautions Act. This proclamation, that completely changed the basis of wool-selling, as evolved by centuries of commercialism, was the result of an agreement arrived at between the Imperial and Commonwealth Governments. The Commonwealth Government undertook to acquire the balance of the 1916-17 season's wool production, on behalf of the Imperial Government, at a flat rate of 15½d. per pound, the approximate equivalent of 55 per cent above pre-war rates. Such a radical departure from all previous modes of buying and selling involved the substitution of a new system for the old, and considerable difficulties were encountered during the period of appraise-

ment from January to June, 1917. The appraising system in New Zealand was not on precisely similar lines, but results were obtained both in the Commonwealth and the Dominion that proved very satisfactory, considering the initial difficulties of such a stupendous undertaking. Two months were spent in the preparation of the scheme for acquiring wool of vastly different types, to the value of 25 millions sterling, and the experience gained proved of immense advantage to the more successful working of the acquisition scheme during the twelve months covered by this annual review.

The actual quantity of greasy and scoured wool acquired by the Commonwealth authorities for the Imperial Government was as follows:

	Bales.	Butts and Bags.	Lbs.
Greasy	1,672,483	208,623	553,713,279
Scoured	201,924	1,442	46,196,661
Totals	1,874,407	210,065	599,909,940

The total flat-rate value of the wool submitted amounted to £42,903,395.

After allocating wool to local manufacturers, the quantity purchased by the Imperial Government amounted to—

	Bales.	Butts and Bags.	Lbs.	Appraised Value.		
				£	s.	d.
Greasy	1,627,360	208,723	553,713,279	34,619,564	19	9
Scoured	197,246	1,442	46,196,661	4,956,855	0	7
Total	1,824,606	210,165	599,909,940	39,576,420	0	4

It was the first time in the wool industry of Australia that the whole of the season's production was acquired by one buying authority. In the previous season only a portion of the wool was acquired for the British Government. Moreover, when the 1916-17 season closed there were privately-owned wools in store that were bought prior to the acquisition, and held for shipment to neutral or Allied destinations. Permits to ship were not granted, and all stocks so held of the value of £50 and over had to be rendered up for acquisition on the 15½d. basis. This action of the Government

resulted in the most complete clearance of wool ever known in the history of the trade. Even small, out of the way parcels stowed away in some of the stores came within the scope of the regulations, and passed into the pool. The approximate quantity in bales appraised compares with the total sold and appraised in the various States during the previous season as follows:

States.	Season 1917-18.	Season 1916-17.
	<i>Bales.</i>	<i>Bales.</i>
New South Wales	762,284	719,952
Victoria	493,108	458,979
Queensland	312,418	275,141
South Australia	183,399	136,513
Western Australia	117,624	51,350
Tasmania	34,356	32,989
Totals	1,903,189	1,674,924

Increase: 228,265 bales.

The following tables enable us to continue the statistics of sheep, wool production and sales, etc., which we have been obliged to curtail for several years past, and it is hoped that in our own Wool Review of coming years we shall be able to carry these tables as has been done heretofore.

AUSTRALASIAN WOOL SALES, SEASONS OF 1912-13, TO 1917-18, INCLUSIVE.

Total Sales.

Centers.	1917-18.	1916-17.	1915-16.	1914-15.	1913-14.	1912-13.
	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>
Sydney	747,623	707,254	707,969	547,496	775,443	664,482
Melbourne	378,736	348,467	268,270	278,061	348,368	312,698
Geelong	132,533	118,567	86,714	99,480	115,013	107,315
Adelaide	181,331	136,513	115,314	92,372	141,642	147,983
West Australia	118,905	51,350	1,459	Nil	3,860	3,182
Brisbane	313,837	275,141	246,376	182,542	292,875	259,150
Tasmania	34,366	32,989	22,016	22,921	26,543	23,840
Commonwealth . . .	1,907,331	1,670,281	1,443,118	1,222,872	1,703,744	1,513,650
New Zealand	581,531	546,300	364,861	321,927	264,834	286,151
Australasia	2,488,862	2,216,581	1,807,979	1,544,799	1,968,578	1,804,801

202 NATIONAL ASSOCIATION OF WOOL MANUFACTURERS.

PROPORTION OF MERINO AND CROSSBRED WOOLS IN THE SEVERAL STATES.

Description.	Sydney.		Melbourne.		Geelong.		Adelaide.		West Australia.	
	Bales.	%	Bales.	%	Bales.	%	Bales.	%	Bales.	%
Merino	560,717	75	178,638	47	64,868	49	161,218	89	109,399	92
Crossbred and all strong wool breeds	186,906	25	200,098	53	67,665	51	20,113	11	9,506	8
	747,623		378,736		132,533		181,331		118,905	

MERINO AND CROSSBRED. — Continued.

Description.	Brisbane.		Tasmania.		New Zealand.		Total 1917-18.	
	Bales.	%	Bales.	%	Bales.	%	Bales.	%
Merino	306,031	97	15,498	45	17,790	3	1,414,159	57
Crossbred and all strong wool breeds	7,806	3	18,868	55	563,741	97	1,074,703	43
	313,837		34,366		581,531		2,488,862	

NET PRODUCTION AND WEIGHT.

States.	1917-18.		1916-17.		1915-16.	
	Production.	Net Weight.	Production.	Net Weight.	Production.	Net Weight.
	Bales.	Lbs.	Bales.	Lbs.	Bales.	Lbs.
New South Wales	899,625	289,967,130	844,000	271,768,000	794,000	248,125,000
Victoria	366,222	118,040,675	358,000	108,474,000	212,000	66,250,000
Queensland	333,356	107,447,306	295,000	94,990,000	298,000	93,125,000
South Australia	152,601	49,186,354	116,000	36,424,000	70,000	21,875,000
West Australia	119,456	38,503,058	73,000	25,696,000	81,000	25,312,600
Tasmania	36,071	11,626,404	36,000	10,620,000	29,000	9,062,500
Commonwealth	1,907,331	614,770,927	1,722,000	547,972,000	1,484,000	463,750,000
New Zealand	581,531	209,840,966	546,000	193,830,000	610,656	181,282,880
Australasia	2,488,862	824,611,893	2,268,000	741,802,000	1,994,656	645,032,880

The figures of Production in the above Table for 1915-16 are those FOR EXPORT only. Those for 1916-17 and 1917-18 include Wool FOR EXPORT AND FOR MANUFACTURE IN AUSTRALIA.

AUSTRALASIAN SALES, WEIGHTS, AND VALUES, TWELVE YEARS.

Season.	Sales.	Net Weight.	Average Net Weight.	Gross Value.	Average Per Bale.		
	<i>Bales.</i>	<i>Lbs.</i>	<i>Per bale.</i>	<i>£</i>	<i>£</i>	<i>s.</i>	<i>d.</i>
1917-1918 .	2,488,862	824,611,893	331.3	55,806,998	22	8	5
1916-1917 .	2,216,581	722,505,476	327.3	47,951,729	21	12	8
1915-1916 .	1,807,979	580,234,830	322.7	29,903,532	16	10	10
1914-1915 .	1,544,799	504,533,053	329.1	19,742,546	12	15	7
1913-1914 .	1,968,578	639,769,519	327.2	26,079,536	13	4	11
1912-1913 .	1,804,801	579,750,442	321.2	24,642,643	13	13	1
1911-1912 .	1,926,926	638,197,891	331.2	22,682,090	11	15	5
1910-1911 .	1,865,167	612,365,881	332.1	23,346,602	12	10	4
1909-1910 .	1,889,745	634,009,448	335.5	25,712,774	13	12	2
1908-1909 .	1,657,906	543,653,485	330.6	18,805,529	11	6	10
1907-1908 .	1,351,121	450,869,077	333.7	17,577,249	13	0	2
1906-1907 .	1,537,798	522,389,990	339.7	21,835,131	14	3	11
	22,06 0,263	7,252,890,985	328.7	334,086,359	15	2	11

SHEEP RETURNS.

States.	1917.	1916.	1915.	1914.	1913.
New South Wales	37,455,330	33,713,901	33,009,033	36,287,000	39,842,518
Victoria	14,760,018	12,576,587	10,546,632	12,051,685	12,113,682
Queensland	15,812,425	15,245,508	16,107,225	23,129,919	21,786,600
South Australia	5,091,282	3,800,000	3,674,547	4,208,461	5,073,057
West Australia	6,454,957	5,501,000	4,831,727	4,471,941	4,418,402
Tasmania	1,709,343	1,702,579	1,613,139	1,862,600	1,862,600
Commonwealth	81,283,350	72,539,575	69,781,303	82,011,606	85,096,859
New Zealand	25,270,386	24,753,324	24,607,868	24,465,526	24,798,763
Australasia	106,553,736	97,292,899	94,389,171	106,477,132	109,895,622

IRISH WOOL MANUFACTURING.

AN OLD AND SUBSTANTIAL BUSINESS QUICKENED BY THE GREAT WAR.

"IRISH TWEEDS" long had a world-wide reputation, and though the most characteristic of them are of the homespun variety, spun and woven in peasant cottages, yet there are upwards of 80 woollen mills in Ireland, well distributed over the area. There are only six

of 32 counties that do not contain at least one of these wool manufacturing establishments. The annual Irish wool clip is not a large one—approximately 14,000,000 pounds produced by about 3,600,000 sheep that find favorable grazing on the green hills. But other than Irish wools are used in the Irish wool manufacture—indeed of the Irish clip only about one-third is retained at home. Both yarns and wools are imported in considerable quantities for blending with the native stock and for production of the durable and sightly fabrics for which the Green Isle is famous.

Though the wool manufacture in Ireland, according to Mr. Alfred S. Moore writing in the "Wool Record and Textile World," is subordinate to the linen manufacture, yet this other industry is fairly healthy and prosperous in the south and west, and an Irish reconstruction committee in session in Dublin is considering how the water supply of the country can be utilized for generating electric power for the use of Irish wool manufacturing concerns.

Many of the old-time Irish people who came to the United States proved very proficient in the manufacturing art. Wages in the mills of Ireland are said to be lower than in Scotland and in England, but strikes in Ireland are less persistent and less numerous. Most of the products of the Irish factories are shipped abroad. Germany was once a good customer; so was Austria. Irish tweeds and friezes are not unknown in the United States. Throughout the war the Irish woolen mills gave up their familiar fabrics to turn out cloths suitable for military service. This proved a profitable business—even the odd fancy yarns being diverted into army blankets. Pay was prompt and prices remunerative, so that the Irish wool manufacture comes out of the war with its resources strengthened and with mill owners enabled to secure new and improved machinery and to adopt more scientific methods of production.

AN IMPORTANT TRADE CHANGE.

A NOTABLE event in the history of the wool business of Boston is the dissolution of the firm of Brown & Adams, who have conducted an exceedingly successful business in the handling of domestic and foreign wools for many years. In 1917 they celebrated their twenty-fifth anniversary at which time there were only two wool concerns in Boston with an older record under the same personnel. In the meantime this has been reduced to one. While it is a matter of

regret to have so honored a name pass from the wool trade of Boston, yet the business of the old firm will be carried on in the old location by the gentlemen who composed the former firm, under different firm names.

The following notice was recently issued to the trade:

"The wool business heretofore conducted by Brown & Adams will be continued by the partners in the following manner.

The organization and warehouses connected with the handling of Domestic Fleece, Territory and Texas wool and Mohair will be taken over and this business continued by

Samuel G. Adams,
Edmund F. Leland,
Harry P. Bradford, and
Harold M. Cummings,

under the firm name of

ADAMS & LELAND.

The organization connected with the handling of Foreign wool will be taken over and this business continued by

Jacob F. Brown, and
Albert S. Howe,

under the firm name of

BROWN & HOWE.

We wish to thank you for all the business and courtesies with which you have favored us in the past and beg to assure you that the succeeding firms will endeavor to merit your confidence in the future."

COMPARATIVE STATEMENT OF IMPORTS AND EXPORTS OF
WOOL AND MANUFACTURES OF WOOL FOR THE TWELVE
MONTHS ENDING DECEMBER 31, 1917 AND 1918.

GROSS IMPORTS.

ARTICLES AND COUNTRIES.	Quantities for Twelve Months ending December 31.		Values for Twelve Months ending December 31.	
	1917.	1918.	1917.	1918.
WOOL, HAIR OF THE CAMEL, GOAT, ALPACA, AND OTHER LIKE ANIMALS, AND MANUFACTURES OF:				
UNMANUFACTURED—				
Class 1—Clothing (free)	<i>Pounds.</i>	<i>Pounds.</i>		
Imported from—				
United Kingdom	1,702,851	38,675	\$1,018,988	\$12,591
Canada	1,973,595	2,717,725	1,002,180	1,703,637
Argentina	180,765,784	203,238,338	76,287,039	118,885,028
Chile	16,370,439	10,886,730	6,216,109	6,009,098
Peru	3,924,290	3,900,173	1,546,197	2,237,919
Uruguay	36,623,341	17,655,598	17,105,618	11,457,554
China	21,208,068	10,595,636	6,263,067	3,624,308
Australia	6,981,210	65,117,777	4,480,756	42,599,633
New Zealand	261,852	6,276,375	114,032	3,527,831
British South Africa	47,461,075	51,063,594	18,484,631	25,633,919
Other countries	3,028,921	2,510,254	835,062	1,098,448
Total	320,801,426	373,910,875	\$133,353,679	\$216,789,966
Class 2—Combing (free)				
Imported from—				
United Kingdom	56,400		\$28,200	
Canada	11,299,397	709,549	7,050,296	\$569,249
Argentina	9,390,914	2,357,025	3,714,075	1,516,716
Other countries	1,586,595	1,156,649	627,734	560,686
Total	22,333,306	4,223,223	\$11,420,305	\$2,646,651
Hair of the Angora goat, etc. (dutiable)				
Imported from—				
United Kingdom	308,220	60,280	\$116,590	\$31,934
Peru	1,153,541	1,254,985	494,262	1,008,008
China	401,478	228,060	132,290	96,837
British South Africa	2,982,654	4,735,936	1,143,430	1,927,374
Other countries	11,320	22,155	3,992	15,752
Total	4,857,213	6,301,416	\$1,890,564	\$3,079,905
Class 3—Carpet (free)				
Imported from—				
Greece	266,285		\$68,860	
Italy	1,445,172		414,914	
Portugal	113,856	54,109	22,252	\$28,080
Russia in Europe	74,400	22,390	30,504	8,626
Spain	3,140,435	48,930	912,729	19,818
United Kingdom	2,820,785		1,015,547	
Argentina	21,288,185	15,068,215	9,031,151	8,519,582
Chile	3,677,456	8,196,911	1,377,885	4,685,605
China	26,601,520	31,198,498	7,241,009	10,055,246
British India	211,429	9,575	55,299	2,330
Russia in Asia		2,717,597		562,314
British South Africa	3,977,898	4,442,103	1,156,952	2,014,177
Other countries	9,385,181	7,533,530	3,565,801	3,360,316
Total	73,002,602	69,291,858	\$24,892,904	\$29,256,094
Total unmanufactured	420,994,547	453,727,372	\$171,557,452	\$251,772,616

COMPARATIVE STATEMENT OF IMPORTS AND EXPORTS OF
WOOL, Etc.GROSS IMPORTS.—*Continued.*

ARTICLES AND COUNTRIES.	Quantities for Twelve Months ending December 31.		Values for Twelve Months ending December 31.	
	1917.	1918.	1917.	1918.
MANUFACTURES OF —				
Carpets and carpeting, etc. (dutiabie)	<i>Sq. Yards.</i>	<i>Sq. Yards.</i>		
Carpets and rugs woven whole (dutiabie) . . .	654,371	259,637	\$2,950,613	\$1,293,200
All other (dutiabie) . .	245,003	93,618	789,705	364,373
Total	899,374	353,255	\$3,740,318	\$1,657,573
CLOTHS (dutiabie)	<i>Pounds.</i>	<i>Pounds.</i>		
Imported from—				
Belgium	3,631,087	1,991,457	\$5,349,085	\$3,779,543
United Kingdom . . .	1,075,804	156,881	1,161,923	490,022
Other countries . . .				
Total	{ lbs. 4,706,891 sq. yds. 6,427,118 }	{ 2,048,338 3,056,374 }	\$6,511,008	\$4,269,565
DRESS GOODS, WOMEN'S AND CHILDREN'S (dutiabie)	<i>Pounds.</i>	<i>Pounds.</i>		
Imported from—				
France	10,455	918	\$24,288	\$2,588
United Kingdom . . .	705,909	467,589	1,076,359	966,193
Other countries . . .	58,453	16,709	82,638	31,430
Total	{ lbs. 774,817 sq. yds. 3,229,381 }	{ 485,216 1,912,621 }	\$1,183,285	\$1,000,216
Tops, pounds (dutiabie) .	<i>Pounds.</i>	<i>Pounds.</i>		
Hair of the Angora goat, alpaca, etc. (dutiabie) .	25,527	77,434	\$14,397	\$115,866
Press cloth of camel's hair for oil milling pur- poses (free)		145,936	1,597,609	271,560
Rags, noils, and other waste (free)			2,229,864	364,822
Wearing apparel (duti- able)			3,212,680	9,779,656
Yarn, pounds (dutiabie) .	332,240	820,518	530,643	1,512,606
All other manufactures of (dutiabie)			4,323,472	3,837,187
Total manufact- ures of			\$23,343,276	\$22,827,051

COMPARATIVE STATEMENT OF IMPORTS AND EXPORTS OF
WOOL, Etc. — *Continued.*

EXPORTS OF WOOL AND MANUFACTURES OF.

FOREIGN.				
ARTICLES.	1917.	1918.	1917.	1918.
	Quantities.	Quantities.	Values.	Values.
WOOL, HAIR OF THE CAMEL, GOAT, ALPACA, AND OTHER LIKE ANIMALS, AND MANUFACTURES OF:				
UNMANUFACTURED—				
Wool of the sheep, hair of the goat, camel, and other like animals:				
Class 1—Clothing, lbs.	1,240,947	407,795	\$625,355	\$272,345
Class 2—Combing, "	30,111	44,450	5,527	32,448
Hair of the Angora goat, al- paca, and other like ani- mals, lbs.	148,970	63,166	78,855	34,012
Class 3—Carpet, lbs.	1,000	280	280	280
Total unmanufactured . . .	1,421,028	515,411	\$710,017	\$338,805
MANUFACTURES OF —				
Carpets and carpeting —				
Carpets and rugs woven whole, sq. yds.	1,613	6,417	\$22,260	\$74,990
All other, sq. yds.	4,849	194	10,593	1,319
Cloths:				
Lbs.	14,942	2,202	18,305	4,110
Sq. yds.	30,146	3,538		
Dress goods, women's and chil- dren's:				
Lbs.	34,220	683	49,141	1,296
Sq. yds.	94,051	2,071		
Press cloths of camel's hair, for oil milling purposes	391	89		
Rags, noils, and other waste	29,899	72		
Wearing apparel	18,759	47,636		
Yarn, lbs.	5,234	7,578	2,920	7,893
All other	6,337	39,901		
Hair of the Angora goat, alpaca, etc., manufactures of	13,286	878		
Total manufactures of			\$172,191	\$178,184

COMPARATIVE STATEMENT OF IMPORTS AND EXPORTS OF
WOOL, Etc.EXPORTS OF WOOL AND MANUFACTURES OF. — *Concluded.*

DOMESTIC.				
ARTICLES.	1917.	1918.	1917.	1918.
	Quantities.	Quantities.	Values.	Values.
WOOL, AND MANUFACTURES OF:				
Unmanufactured, lbs.	1,827,324	407,202	\$1,308,698	\$463,430
Manufactures of —				
Blankets			² \$135,389	\$2,691,408
Cloths and dress goods { lbs. . .	{ ² 2,541,205	{ 3,070,139	{ ² 3,046,651	8,568,856
{ yds. . .				
Wearing apparel			¹ \$2,401,501	
For men and boys			² 856,975	\$2,797,704
For women and children			² 817,653	1,441,558
Wearing apparel:				
Exported to —				
France			\$272,698	\$676,448
Italy			270,356	582,737
Netherlands				
Russia in Europe			7,588	227,838
United Kingdom			56,568	268,745
Canada			2,397,902	1,485,009
Mexico			342,771	161,309
Cuba			160,447	116,350
Argentina			73,622	18,340
Russia in Asia			4,337	23,526
Other countries			489,840	678,960
Total wearing apparel			\$4,076,129	\$4,239,262
Woolen rags, lbs.	14,453,980	3,344,222	1,803,675	346,272
All other			8,035,435	4,013,113
Total manufactures of wool			\$17,097,279	\$19,858,911

¹ Figures are for six months, January to June, inclusive.² Figures cover period beginning July 1.

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WOOL AND MANUFACTURES OF, REMAINING IN WAREHOUSE
DECEMBER 31, 1917 AND 1918.

ARTICLES.	1917.	1918.	1917.	1918.
	Quantities.	Quantities.	Values.	Values.
WOOL, HAIR OF THE CAMEL, GOAT, ALPACA, AND OTHER LIKE ANIMALS, AND MANUFACTURES OF—				
UNMANUFACTURED—				
Hair of the Angora goat, alpaca, and other like animals (lbs.) . .	574,723	1,531,784	\$219,908	\$642,730
MANUFACTURES OF—				
Carpets and rugs woven whole, sq. yds.	2,948	41,416	\$17,354	\$258,996
Carpets and rugs, all other, sq. yds.,	90	15,948	743	50,192
Cloths:				
Lbs.	1,267,392			
Sq. yds.	2,304,839		1,168,991	
Worsted { Lbs.		51,708		142,218
{ Sq. yds.		93,723		
Woolens { Lbs.		42,505		75,869
{ Sq. yds.		68,811		
Made of the hair of the Angora goat, etc.		11,654	65,788	42,270
Dress goods, women's and children's:				
Lbs.	677,036	44,495		
Sq. yds.	1,391,868	376,306	420,359	119,903
Wearing apparel			278,577	80,231
Yarn (lbs.)	2	4	4,946	6,858
All other			463,275	40,888
Total manufactures of (lbs.)			\$2,415,091	\$817,425

QUARTERLY REPORT OF THE BOSTON WOOL MARKET
FOR JANUARY, FEBRUARY, MARCH, 1919, AND MARCH, 1918.

DOMESTIC WOOLS. (F. NATHANIEL PERKINS.)

	1919.			1918.
	January.	February.	March.	March.
OHIO, PENNSYLVANIA, AND WEST VIRGINIA.				
(WASHED.)	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
XX and above	70	68	67	75
X	*	*	*	72
Blood	*	*	*	83
"	*	*	*	83
Fine Delaine	70	70	70	83
(UNWASHED.)				
Fine Clothing	57	56	54	65
Blood, Staple	74	67	66	80
"	75	66	60	80
" "	78	63	58	80
Fine Delaine	66	64	64	75
MICHIGAN, WISCONSIN, NEW YORK, ETC.				
(UNWASHED.)				
Fine Clothing	55	55	53	65
Blood, Staple	72	65	65	78
"	73	64	59	78
" "	77	62	56	78
Fine Delaine	63	61	61	73
KENTUCKY AND INDIANA.				
(UNWASHED.)				
Blood	75	67	65	86
"	78	68	62	86
Braid	65	60	53	70
MISSOURI, IOWA, AND ILLINOIS.				
(UNWASHED.)				
Blood	72	64	57	76
"	76	61	55	78
Braid	63	60	60	65
TEXAS.				
(SCOURD BASIS.)				
12 months, fine and fine medium . .	150	140	140	170
Spring, fine and fine medium . . .	135	130	130	160
Fall, fine and fine medium	120	120	120	155
CALIFORNIA.				
(SCOURD BASIS.)				
12 months, fine	152	140	140	165
Spring, fine	135	132	132	150
Fall, fine	135	130	130	135
TERRITORY WOOL: Montana, Wyoming, Utah, Idaho, Oregon, etc.				
(SCOURD BASIS.)				
Staple, fine and fine medium . . .	160	152	158	180 @ 185
Clothing, fine and fine medium . .	145	145	140	170 @ 175
Blood	163	142	148	170 @ 180
"	130	120	110	155 @ 160
"	128	105	100	130 @ 140
NEW MEXICO.				
(SCOURD BASIS.)				
No. 1	148	146	148	165
No. 2	130	125	125	145
No. 3	82	80	70	120
GEORGIA AND SOUTHERN.				
Unwashed	64	59	54	70

* But little in the market.

BOSTON, April 3, 1919.

DOMESTIC WOOLS.

The new year opened with a continuance of the dullness prevailing in the trade during December. Deepest interest was centered in the Government auction sales commencing January 15th.

At these sales the Government by placing its minimum limits on wool on a level with prices elsewhere in the world resulted in a much more active interest being taken in the sales, and as the sales progressed the activities of buyers justified the Government's action.

There has been a comparatively light business on "Summer Street" on domestic wools outside of the business between the Government and manufacturers. There has been more or less operation in the trade on noils and tops. At this season of the year wool merchants ordinarily have their representatives in the various wool-producing sections of the West, but few buyers, so far, have left for their field of operations.

What is a safe basis to pay for the new clip? is the paramount question on the "Street" to-day. It would not be wise to base one's views of values on the prices prevailing at the auction sales in February and March as the purchases have doubtless been made of wools needed for immediate consumption to go into goods already sold; to buy wools for next season's wants is a problem not easy to solve.

At this time it appears probable that the domestic clip will move slowly and not as much bought as usual; growers will probably prefer to ship on consignment.

It appears to be a time for conservative action.

It is reported that the Government plans to suspend wool auction sales in July, for a period of several months. Wool values have fluctuated widely during the recent auction sales, and it is quite impossible to give definite quotations until the wool market values get more firmly established — therefore, former quotations are continued as a basis for comparison.

F. NATHANIEL PERKINS.

PULLED WOOLS. (W. A. BLANCHARD.)

	1919.			1918.
	January.	February.	March.	March.
	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
Extra, and Fine A	140 @ 150	140 @ 150	140 @ 150	165 @ 175
A Super	120 @ 130	120 @ 130	120 @ 130	155 @ 160
B Super	100 @ 115	100 @ 115	100 @ 110	140 @ 150
C Super	75 @ 90	75 @ 90	65 @ 85	105 @ 115
Fine Combing	130 @ 140	130 @ 140	130 @ 140	160 @ 165
Medium Combing	115 @ 125	115 @ 125	115 @ 125	145 @ 150
Low Combing	90 @ 105	90 @ 105	85 @ 105	115 @ 125

PULLED WOOL.

The prices for the three months, as given above, show a decline from the quotations of the previous quarter, due to the decision of the Government to sell its holdings at auction. The British issue prices on wool for civilian purposes were taken as a basis of values, and established the minimum prices, which would be accepted. A further modification of seven and one-half per cent in price level was made in the two closing sales of March.

Much of the wool that was offered both in the grease and scoured was of inferior grading, but we have endeavored to make our quotations conform to previous records of standard pullings. Fine and medium wools sold freely at full prices, but lower grades were in poor demand.

W. A. BLANCHARD.

FOREIGN WOOLS. (MAUGER & AVERY.)

Scoured Bases, 1919.

	1919.			1918.
	January.	February.	March.	March.
Australian Combing:	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
Choice	178	178	180	110
Good	165	165	165	90
Average	160	160	160	85
Australian Clothing:				
Choice	158	155	155	90
Good	156	154	154	85
Average	150	150	145	70
Sydney and Queensland:				
Good Clothing	155	155	152	85
Good Combing	175	175	178	90
Australian Crossbred:				
Choice				103
Average				100
Australian Lambs:				
Choice	145	145	145	90
Good	135	135	130	87
Good Defective	130	130	125	80
Cape of Good Hope:				
Choice	150	150	145	77
Average	140	140	130	68
Montevideo:				
Choice	145	145	135	92
Average	140	140	132	90
Crossbred, Choice	125	125	115	96
English Wools:				
Sussex Fleece				
Shropshire Hogs				
Yorkshire Hogs				
Irish Selected Fleece				
Carpet Wools:				
Scotch Highland, White				
East India, 1st White Joria				
East India, White Kandahar				
Donskoi, Washed, White				
Aleppo, White				
China Ball, White			65	60
" No. 1, Open			62	52 @ 55
" No. 2, Open			45	40 @ 45

BOSTON, April 14, 1919.

FOREIGN WOOL.

The quarter under review has developed a much stronger demand for the finer qualities of wool, in response to an improved demand for woollen goods.

There has also been a strong demand for medium wools, of a B Super quality, grease or scoured. Other descriptions have been neglected and to a great extent withdrawn from the Government auction sales.

The best fine wools are becoming more scarce, and will probably appear in more limited quantities at the auction sales.

Manufacturers generally, having received large orders and repeat orders, are covering their sales and buying freely of the better descriptions of wool.

English wools are not for sale here, and India wools are practically the only carpet wools offered by the Government at the present time, with the exception of an occasional parcel of Iceland wool.

Reports from London indicate a strong demand, for clothing purposes, for fine wools, and the general situation appears to be improved.

MAUGER & AVERY.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS
OF AUGUST 24, 1912.

Of the Bulletin of the National Association of Wool Manufacturers, published quarterly, at 50 State Street, Boston, Mass., for April, 1919.

STATE OF MASSACHUSETTS } ss.
COUNTY OF SUFFOLK }

Before me, a Notary Public, in and for the State and county aforesaid, personally appeared Winthrop L. Marvin, who, having been duly sworn according to law, deposes and says that he is the Editor of the Bulletin of the National Association of Wool Manufacturers, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 443, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are:

Publisher, National Association of Wool Manufacturers, 50 State Street, Boston, Mass.

Editor, WINTHROP L. MARVIN, 50 State Street, Boston, Mass.

Managing Editor, none.

Business Managers, none.

2. That the owners are (Give names and addresses of individual owners, or, if a corporation, give its name and the names and addresses of stockholders owning or holding 1 per cent or more of the total amount of stock):

National Association of Wool Manufacturers, 50 State Street, Boston, Mass., the principal officers being: *President*, Frederic S. Clark, North-Billerica, Mass.; *Vice-Presidents*, William M. Wood, Boston, Mass.; George H. Hodgson, Cleveland, O.; Franklin W. Hobbs, Boston, Mass.; *Secretary and Treasurer*, Winthrop L. Marvin, Boston, Mass.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are (If there are none, so state):

There are no bonds, mortgages or securities of any kind.

WINTHROP L. MARVIN,
Editor.

Sworn to and subscribed before me this 21st day of March, 1919.

JAMES G. HILL,
Notary Public.

(My commission expires March 25, 1921.)

IMPORTS OF WOOL AND MANUFACTURES OF WOOL.

Entered for Consumption, Years ending June 30, 1917 and 1918. Quantities, Values, Rates of Duty, and Accruing Duties.

Compiled and prepared from Reports, Bureau of Foreign and Domestic Commerce, Department of Commerce.

ARTICLES.	Rates of duty.	1917.					1918.				
		Quantities.	Values.	Duties.	Value per unit of quantity.	Actual and computed ad valorem rate.	Quantities.	Values.	Duties.	Value per unit of quantity.	Actual and computed ad valorem rate.
Wools, hair of the camel, goat, alpaca, or other like animals:											
Class 1—Merino, mestizo, metz, or metis wools, or other wools of merino blood, immediate or remote, down clothing wools, etc., and all wools not hereinafter included in classes two and three—											
Unwashed wool	Free . . .	266,152,483.00	96,220,453.00	. . . . .	.362 . . .	. . . . .	276,484,637.00	144,486,852.00	. . . . .	.623 . . .	. . . . .
Washed wool	Free . . .	6,317,024.00	2,601,969.00	. . . . .	.401 . . .	. . . . .	6,400,316.00	3,696,227.00	. . . . .	.560 . . .	. . . . .
Scoured wool (pounds)	Free . . .	7,010,531.00	2,686,987.00	. . . . .	.382 . . .	. . . . .	20,856,609.00	16,713,428.00	. . . . .	.801 . . .	. . . . .
Total, Class 1 (pounds)	Free . . .	279,480,038.00	101,503,109.00	. . . . .	. . . . .	. . . . .	303,941,562.00	164,899,507.00	. . . . .	. . . . .	. . . . .
Class 2—Leicester, Cotswold, Lincolnshire, down combing wools, Canada long wools, or other like combing wools of English blood, and usually known by the terms herein used, and also hair of the camel, Angora goat, alpaca and other like animals—											
Washed wool	Free . . .	16,142,037.00	6,360,688.00	. . . . .	.388 . . .	. . . . .	11,950,031.00	7,622,987.00	. . . . .	.638 . . .	. . . . .
Scoured wool (pounds)	Free . . .	30,540.00	22,080.00	. . . . .	.723 . . .	. . . . .	736,204.00	563,191.00	. . . . .	.765 . . .	. . . . .
Camel's hair—											
Washed and unwashed (pounds) . . .	Free . . .	883,376.00	340,969.00	. . . . .	.386 . . .	. . . . .	925,250.00	461,669.00	. . . . .	.499 . . .	. . . . .
Hair of the Angora goat, alpaca, and other like animals—											
On the skin	15 per cent.	497,181.00	190,496.00	28,574.40	.383 . . .	15.00	29,358.00	9,189.00	1,378.35	.313 . . .	15.00

Not on the skin	15 per cent.	8,870,620.00	3,311,312.00	496,696.80	.373	15.00	1,797,244.00	883,436.00	132,515.40	.492	15.00
Total (pounds)	Free	17,055,953.00	6,723,737.00	. . . . .	. . . . .	. . . . .	13,611,485.00	8,647,847.00	. . . . .	.635	. . . . .
Total (pounds)	Dutiable	9,367,801.00	3,501,808.00	525,271.20	. . . . .	15.00	1,826,602.00	892,625.00	133,893.75	.489	. . . . .
Total, Class 2 (pounds) . . . . .	. . . . .	26,423,764.00	10,225,545.00	525,271.20	. . . . .	. . . . .	15,438,087.00	9,540,472.00	133,893.75	.618	. . . . .
Class 3 — Donskol, native South American, Cordova, Valparaiso, native Smyrna, Rus- sian camel's hair, etc.											
Wool, washed and unwashed	Free	66,835,317.00	19,467,713.00	. . . . .	.291	. . . . .	56,062,099.00	22,522,492.00	. . . . .	.402	. . . . .
Scoured (pounds)	Free	577,444.00	267,832.00	. . . . .	.464	. . . . .	2,814,859.00	1,351,892.00	. . . . .	.491	. . . . .
Camel's hair, Russian, washed and unwashed (pounds)	Free	261,967.00	86,827.00	. . . . .	.332	. . . . .	244,270.00	104,557.00	. . . . .	.428	. . . . .
Scoured (pounds)	Free . . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	33,938.00	18,603.00	. . . . .	.55	. . . . .
Total, Class 3 (pounds)	Free	67,674,728.00	19,822,372.00	. . . . .	. . . . .	. . . . .	59,155,166.00	24,027,544.00	. . . . .	.406	. . . . .
Total wools, etc., unmanufactured	{ Free	364,210,719.00	128,049,218.00	. . . . .	. . . . .	. . . . .	376,708,213.00	197,574,898.00	. . . . .	.524	. . . . .
Total wools, etc., unmanufactured	} Dutiable	9,367,801.00	3,501,808.00	525,271.20	. . . . .	15.00	1,826,602.00	892,625.00	133,893.75	.489	15.00
Manufactures composed wholly or in part of wool, worsted, the hair of the camel, goat, alpaca, or other like animals — Wool and hair advanced in any manner, or by any process of manufacture, beyond the washed and scoured condi- tion, not especially provided for . . . . .	. . . . .	373,578,520.00	131,551,026.00	525,271.20	. . . . .	. . . . .	378,534,815.00	198,467,523.00	133,893.75	.524	. . . . .
8 per cent.		19,535.00	7,525.00	602.08	.385	8.00	14,931.00	8,576.00	686.08	.574	8.00
8 per cent.		19,535.00	7,525.00	602.08	.385	8.00	14,931.00	8,576.00	686.08	.574	8.00
Raga, mungo, locks, noils, shoddy, and waste —											
Noils, carbonized or others (pounds), Raga and locks (pounds)	Free	2,091,841.00	1,293,141.00	. . . . .	.618	. . . . .	1,670,125.00	952,192.00	. . . . .	.57	. . . . .
Shoddies (pounds)	Free	1,639,958.00	202,778.00	. . . . .	.123	. . . . .	1,121,147.00	222,529.00	. . . . .	.198	. . . . .
Wastes —	Free	1,398.00	351.00	. . . . .	.251	. . . . .	3,517.00	1,238.00	. . . . .	.352	. . . . .
Slubbing, ring and garnetted (pounds) Top, roving, and card (pounds)	Free	39,824.00	20,370.00	. . . . .	.511	. . . . .	101,246.00	29,289.00	. . . . .	.289	. . . . .
Yarn, thread, bur, and all other wastes, carbonized wool, and wool extract (pounds)	Free	28,162.00	2,515.00	. . . . .	.089	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Total raga, mungo, locks, noils, wastes, etc. (pounds)	Free	811,260.00	149,178.00	. . . . .	.137	. . . . .	303,065.00	92,728.00	. . . . .	.306	. . . . .
		4,612,443.00	1,668,333.00	. . . . .	. . . . .	. . . . .	3,199,100.00	1,297,976.00	. . . . .	. . . . .	. . . . .

Imports of Wool and Manufactures of Wool, entered for Consumption, Years ending June 30, 1917 and 1918. Quantities, Values, Rates of Duty, and Accruing Duties. — Continued.

ARTICLES.	Rates of duty.	1917.					1918.				
		Quantities.	Values.	Duties.	Value per unit of quantity.	Actual and ad valorem rate.	Quantities.	Values.	Duties.	Value per unit of quantity.	Actual and ad valorem rate.
Wools, hair of the camel, etc. — <i>Continued.</i>											
Manufactures composed wholly or in part of wool, worsted, etc. — <i>Continued.</i>											
Combed wool or tops, made wholly or in part of wool or camel's hair (pounds)	8 per cent,	21,007.00	Dollars. 17,184.00	Dollars. 1,374.72	Dollars. .818	8.00	69,161.00	Dollars. 98,108.00	Dollars. 1,818.64	Pr. ct. 1.419	8.00
Made from the hair of the Angora goat, etc. (pounds)	20 per cent,	95,833.00	58,013.00	11,602.60	.605	20.00	12,363.00	9,901.00	1,980.20	.801	20.00
Total combed wool or tops, etc. (pounds)	. . . . .	116,840.00	75,197.00	12,977.32	.644	. . . .	81,524.00	108,009.00	9,898.84	1.325	. . . .
Yarns —											
Made wholly or in chief value of wool (pounds)	18 per cent,	41,907.00	57,985.00	10,437.30	1.384	18.00	688,984.00	1,105,589.00	209,806.02	1.705	18.00
Made of hair of Angora goat, etc. (pounds)	25 per cent,	494,841.00	461,386.00	115,346.50	.932	25.00	85,599.00	172,078.00	43,019.50	2.010	25.00
Total yarns (pounds) . . . . .	. . . . .	536,748.00	519,371.00	125,783.70	. . . .	. . . .	774,583.00	1,337,667.00	252,825.52	1.729	. . . .
Blankets composed wholly or in chief value of wool (pounds)	25 per cent,	243,699.00	218,258.00	54,564.50	.896	25.00	5,206,613.00	5,839,921.00	1,459,980.25	1.122	25.00
Ditto (reciprocity treaty with Cuba), (pounds)	25-20 per cent,	45.00	29.00	5.80	.644	20.00	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Ditto (from Philippine Islands) (pounds)	Free . . .	8.00	4.00	. . . . .	.500	. . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Total blankets (pounds)	25 per cent,	243,752.00	218,291.00	54,570.30	.896	. . . .	5,206,613.00	5,839,921.00	1,459,980.25	1.122	25.00
Carpets and carpeting —											
Aubusson, Axminster, moquette and chenille carpets (square yards)	35 per cent,	96,934.00	344,873.00	120,705.55	3.558	35.00	80,426.00	381,478.00	133,517.30	4.743	35.00
Brussels carpets (square yards)	25 per cent,	5,339.00	7,047.00	1,761.75	1.32	25.00	2,328.00	6,502.00	1,625.50	2.793	25.00

Imports of Wool and Manufactures of Wool, entered for Consumption, Years ending June 30, 1917 and 1918. Quantities, Values, Rates of Duty, and Accruing Duties. — Continued.

ARTICLES.	Rates of duty.	1917.					1918.				
		Quantities.	Values.	Duties.	Value per unit of quantity.	Actual and computed ad valorem rate.	Quantities.	Values.	Duties.	Value per unit of quantity.	Actual and computed ad valorem rate.
Wools, hair of the camel, etc.— <i>Continued.</i>											
Manufactures composed wholly or in part of wool, worsted, etc.— <i>Continued.</i>											
Dress goods, women's and children's, coat linings, Italian cloths, bunting, and goods of similar description —											
Bunting (square yards)	{ 35 per cent,	6,260.00	1,864.00	652.40	Dolls. .297 1.153	Pr. ct. 35.00	20,999.00 6,286.00	12,231.00	4,281.90	Dolls. .585 1.946	Pr. ct. 35.00
Coat linings and Italian cloths (square yards)	{ 35 per cent,	2,002,258.00 446,941.00	568,399.00	198,939.66	8.4 1.272	35.00	1,306,287.00 274,891.00	441,658.00	154,580.30	.338 1.607	35.00
Other dress goods —											
Cotton warp (square yards)	{ 35 per cent,	532,837.00	176,542.00	61,789.70	.331 1.306	35.00	650,250.00 157,948.00	247,038.00	86,463.30	.380 1.564	35.00
All other (square yards)	{ 35 per cent,	1,023,109.00 293,673.00	453,242.00	158,634.70	.440 1.344	35.00	436,845.00 131,036.00	269,166.00	94,208.10	.616 2.054	35.00
Total dress goods (square yards)	{	3,570,464.00 877,825.00	1,200,047.00	420,016.45	.336 1.367	35.00	2,414,381.00 570,161.00	970,096.00	339,533.60	.402 1.701	. . .
Felts not woven (pounds)	35 per cent,	21,984.00	40,884.00	14,309.40	1.86	35.00	96,897.00	189,013.00	66,154.55	1.951	35.00
Total felts . . . . .	. . . . .	21,984.00	40,884.00	14,309.40	1.86	35.00	96,897.00	189,013.00	66,154.55	1.951	35.00

Flannels for underwear— Wholly or in chief value of wool— Valued at not above 50 cents per pound (pounds)	25 per cent,	607.00	274.00	68.50	.451	25.00	135.00	63.00	15.75	.467	25.00
Valued at above 50 cents per pound (pounds)	30 per cent,	151,570.00	208,542.00	62,562.60	1.376	30.00	47,093.00	89,346.00	26,803.80	1.897	30.00
Total flannels, etc. . . . .	. . . . .	152,177.00	208,816.00	62,631.10	1.372	30.00	47,228.00	89,409.00	26,819.55	1.893	30.00
Knit fabrics (not wearing apparel), wholly or in chief value of wool (pounds)	35 per cent,	419.00	1,129.00	395.15	2.694	35.00	3,753.00	11,564.00	4,047.40	3.055	35.00
Total knit fabrics (pounds)	35 per cent,	419.00	1,129.00	395.15	2.694	35.00	3,753.00	11,564.00	4,047.40	3.055	35.00
Laces, embroideries, etc., of wool— Laces, coach, carriage, and auto- mobile	60 per cent,	. . . . .	489.00	293.40	. . . . .	60.00	. . . . .	70.00	42.00	. . . . .	60.00
All other laces, lace articles, em- broideries, nets, etc.	60 per cent,	. . . . .	115,649.00	69,389.40	. . . . .	60.00	. . . . .	76,015.00	45,609.00	. . . . .	60.00
Total laces, etc. . . . .	. . . . .	. . . . .	116,138.00	69,682.80	. . . . .	60.00	. . . . .	76,085.00	45,651.00	. . . . .	60.00
Plushes, velvets, and other pile fabrics, etc., made of wool (pounds)	40 per cent,	3,940.00	4,310.00	1,724.00	1.094	40.00	701.00	1,537.00	614.80	2.193	40.00
Manufactures in chief value of same	40 per cent,	. . . . .	44,690.00	17,876.00	. . . . .	40.00	. . . . .	17,598.00	7,039.20	. . . . .	40.00
Plushes and other pile fabrics made from the Angora goat hair, etc. (pounds)	45 per cent,	48,272.00	58,569.00	26,356.05	1.213	45.00	13,233.00	17,909.00	8,059.05	1.353	45.00
Articles made wholly or in chief value thereof	45 per cent,	. . . . .	18,933.00	8,519.85	. . . . .	45.00	. . . . .	10,065.00	4,529.25	. . . . .	45.00
Total plushes, laces, etc.	Dutiable .	. . . . .	126,502.00	54,475.90	. . . . .	43.06	. . . . .	47,109.00	20,242.30	. . . . .	. . . . .
Press cloth of camel's hair for oil mil- ling purposes, etc.	Free . . .	1,523.00	787.00	. . . . .	.55	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	Free.
Other n.o.p.f. per pound	10 per cent,	283.00	154.00	15.40	.54	10.00	. . . . .	. . . . .	. . . . .	. . . . .	10.00

Imports of Wool and Manufactures of Wool, entered for Consumption, Years ending June 30, 1917 and 1918. Quantities, Values, Rates of Duty, and Accruing Duties. — Continued.

ARTICLES.	Rates of duty.	1917.					1918.				
		Quantities.	Values.	Duties.	Value per unit of quantity.	Actual and valorem rate.	Quantities.	Values.	Duties.	Value per unit of quantity.	Actual and valorem rate.
			Dollars.	Dollars.	Dolls.	Pc. ct.		Dollars.	Dollars.	Dolls.	Pc. ct.
Wools, hair of the camel, etc. — <i>Continued.</i>											
Manufactures composed wholly or in part of wool, worsted, etc. — <i>Continued.</i>											
Wearing apparel: Clothing, ready-made, and articles of wearing apparel, made up or manufactured wholly or in part, composed in chief value of wool —											
Gloves and mittens valued at not more than \$1.20 per dozen pairs	30 per cent,	1,557.00	1,730.00	519.00	1.111	30.00	312.00	360.00	108.00	1.154	30.00
Valued at more than \$1.20 per dozen pairs (dozen pairs)	40 per cent,	12,128.00	36,179.00	14,471.60	2.893	40.00	204,242.00	1,491,992.00	596,796.80	7.305	40.00
Hats of wool (pounds)	35 per cent,	.....	73,078.00	25,577.30	.....	35.00	.....	103,096.00	36,083.60	.....	35.00
Knitted articles n.s.p.f. (pounds)	35 per cent,	.....	191,033.00	66,861.55	.....	35.00	.....	570,783.00	199,771.39	.....	35.00
Shawls, knitted or woven (pounds)	35 per cent,	.....	9,054.00	3,168.90	.....	35.00	.....	55.00	19.25	.....	35.00
Stockings, hose, and half hose made wholly or in part of wool n.o.p.f., made on knitting frames (dozen pairs)	20 per cent,	7.00	35.00	7.00	5.00	20.00	811.00	4,188.00	837.60	5.163	20.00
Selvedge, fashioned, narrowed, etc., finished or unfinished, valued at not more than \$1.20 per dozen pairs (dozen pairs)	30 per cent,	1,047.00	1,085.00	325.50	1.036	30.00	1,120.00	1,219.00	365.70	1.089	30.00
Valued at more than \$1.20 per dozen pairs (dozen pairs)	40 per cent,	33,104.00	186,140.00	74,456.00	5.623	40.00	416,713.00	2,144,253.00	857,701.20	5.146	40.00
Other clothing, ready-made, and articles of wearing apparel, made up or manufactured wholly or in part (pounds)	35 per cent,	.....	1,274,459.00	446,060.65	.....	35.00	.....	4,562,836.00	1,596,992.60	.....	35.00

Ditto (reciprocity treaty with Cuba), (pounds)	35-20 per cent,		16.00	4.48	28.00	8.00	2.24	28.00
Ditto (from Philippine Islands)	Free		824.00					
Total wearing apparel	Free Dutiable		824.00 1,772,809.00	631,451.98	35.62	8,878,790.00	3,288,678.66	
Webbings, gorings, suspenders, bandings, beltings, braids, edgings, fringes, gimps, cords, and other trimmings, etc. (pounds)								
Braids, loom woven or made by hand and ornamented, composed of wool	35 per cent,		5,825.00	2,038.75	35.00	9,062.00	3,171.70	35.00
All other — wholly or in chief value of wool	60 per cent,	896.00	537.60		60.00	650.00	390.00	60.00
Ditto (reciprocity treaty with Cuba)	35 per cent,		408,028.00	142,809.80	35.00	394,583.00	138,104.05	35.00
Of the hair of the Angora goat, etc.,	35-20 per cent,		15.00	4.20	28.00	5.00	1.40	28.00
Total manufactures of wool	40 per cent,		144,954.00	57,981.60	40.00	116,590.00	46,636.00	40.00
Total manufactures of wool	Free		1,669,948.00			1,297,976.00		
Total manufactures of wool	Dutiable		17,622,354.00	6,590,475.23	37.40	26,036,563.00	8,829,507.70	33.91
Total manufactures of wool			19,292,302.00	6,590,475.23	37.40	27,334,549.00	8,829,507.70	
Total wool and manufactures of			129,719,166.00			198,872,874.00		
Total wool and manufactures of	Free		21,124,162.00	7,116,746.43	33.69	26,829,188.00	8,963,401.45	33.29
Total wool and manufactures of	Dutiable		150,843,328.00	7,116,746.43		225,802,062.00	8,963,401.45	



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LAWRENCE — A MANUFACTURER'S VIEW.

By GEORGE E. KUNHARDT,

President of The George E. Kunhardt Corporation, Lawrence, Mass.

(NOTE. — This pamphlet was in preparation while the recent strike of one-fourth or one-fifth of the employees of the Lawrence textile mills was proceeding. It presents a markedly graphic discussion of the Lawrence situation from the standpoint of the manufacturer — and as such is of far more than passing interest — in fact, of value as an historical record.)

At one of the sessions of the Massachusetts State Board of Conciliation and Arbitration late in April of this year, in the course of its investigation of the "strike" situation in Lawrence, a young lady made a statement deploring the living conditions of the working people in that city. Her recital was chiefly of conclusions drawn from recent observation. The feature which evidently most impressed her, was that of a tenement house case, in which the tenant, a foreigner, kept a pig in his cellar, in the midst of other generally squalid surroundings. This discovery, coinciding in point of time with an order of the local authorities to the effect that the keeping of swine in residential areas would no longer be tolerated, led her to infer that the practice of housing such animals with human beings was typical of conditions in Lawrence, and proof that some of the mill workers were not receiving a living or adequate wage.

When questioned by the Chairman of the Board, the narrator explained that she had written a story or novel in which unsatisfactory wage conditions were depicted, and that fear-

ing the picture had been overdrawn, she had gone to Lawrence to correct or verify her imagined facts. She had been on the ground a short time, possibly two or three weeks, and was forming her first impressions of the mill city. What she saw there had aroused her sympathies and had led her to undertake relief work among the striking operatives. There was no question as to her absolute sincerity and singleness of purpose.

If her investigation had been more thorough she might have found in the outlying territory of the city proper numerous instances, and not a few settlements, in which foreign-born residents kept not only pigs, but hens and cows in cellars and parts of houses also occupied by the family. Upon inquiry she would have learned that many of these small live-stock keepers, far from being victims of poverty, were prosperous to the extent of owning the land and houses thus occupied in joint tenancy of man and beast. If her previous researches had been wider in scope, she would have realized that what struck her with dismay was simply a transplanted old-world custom, ancient as the Biblical days when the shepherds lay down with their greasy flocks. The investigator might have gathered on the spot that here was not a question of poverty or riches, but a survival of traditional habits. One born to the custom regards it as no more peculiar than do native Americans the practice of housing themselves with dogs and cats.

The particular error was of no great importance, but it does admirably illustrate a weakness of unskilled investigation. Lawrence has suffered from many just such immature generalizations and faulty conclusions as misled the young author in the case of the pig.

I think I am entirely within the exact facts in saying that the Lawrence situation has been described to non-residents by observers who fall into one of two classes. The investigator, amateur or professional, has been here and has gathered his story. We have also had with us avowed sympathisers with labor imagined as the ancient enemy of capital, and among them extremists who have played the part of agitators. From these two sources has emanated nearly all that has been

printed as news or as special reading matter in the papers and magazines.

No doubt the case of the strikers has furnished more appealing and picturesque material than could be found in the cause of the community as a whole. A squalid tenement, a casual instance of poverty, a striker battered in conflict with the police, are subjects of attractive color, which lend themselves to readable matter far more readily than do the unheroic vigils of the police in their efforts to maintain order. The easy road to the reading public has been followed by some who came with the best intentions of reporting fairly what they observed. The out and out strike sympathiser has of course found it congenial to emphasize whatever might be made to appear proof of the evils of which he complains. The manufacturer and the citizen at large have not been heard from. The story that has gone out is one-sided and partial. Allow me, as a manufacturer and also as a citizen, to show another side.

I have lived in Lawrence and the adjoining town of North Andover for the last thirty-three years as owner and chief executive of The George E. Kunhardt Corporation, manufacturers of textile woolen fabrics. I have been in close touch with the business and civic life of the city. My relations with our employees have always been most friendly and cordial. These personal details I mention in order that a reader may form some idea of the value which may possibly be thought to attach to what I am to say.

Few who have not been intimately connected with the manufacture of textiles can have an adequate conception of the complications arising upon the signing of the armistice on November 11, 1918, and the problem of reverting from a war to a peace basis.

Prior to that event, every mill in Lawrence was driven to its capacity upon highly specialized work. The War Department had been most exacting in requiring literal as well as essential fulfillment of its contracts with the manufacturers. Of civilian work there was practically none. The Government owned all the wool raised in the country or coming in from abroad, and allotted it to mills only for use

in war fabrics. New England woolen and worsted mills were running full 80 per cent on war work during the summer and fall of 1918. The tremendous pressure thus created was rendered doubly onerous during the months of September and October by the devastating and disheartening epidemic of the influenza which swept the country. Such were operating conditions when cessation of hostilities brought on other problems, as novel in the experience of textile industries as had been those created by the war conditions themselves.

Upon the signing of the armistice the War Department cancelled most of its contracts, and gave notice that in a short time all work on war textiles would cease. While I feel that the Department has acted with fairness and intelligence under unprecedented difficulties, nevertheless it is a fact that the pressure brought to bear by it in the first instance to drive every mill into war production, followed by the requirement that these mills should, practically without notice, shift over to civilian work, and for the sake of stabilizing the labor situation should maintain continuous operation of some kind, created conditions which taxed to the utmost the business skill and courage of the manufacturers. The problem was further complicated by the state of the market, both of raw materials and of finished products. It was certain that the price of wool, extravagantly advanced during the war, would fall decidedly with the return of peace conditions and the surcease of government restrictions, but no manufacturer could foresee the date or the extent of the decline. The result was that no mill operator dared contract for wool over any considerable period of future time. Nor did the wholesalers and big cutters of cloth venture to place orders with the mills. They also anticipated a substantial, not to say slashing, reduction in prices of finished goods, and refused to order until the future became more certain. The situation was baffling and precarious. The recital of these details amounts to a repetition of the statement that the manufacturers were placed in a position difficult beyond description in ordinary terms of business.

For the sake of illustration let me cite our own mill as an instance:

In November, 1918, the War Department cancelled orders amounting to over 150,000 yards of khaki melton. Then, during the winter months, a large percentage of civilian orders taken in October of 1918 suffered a like fate. A survey and retrospect of our books as of January 21, 1919, showed approximately as follows:

	Yards.
Spring orders approximated	425,250
Of these were cancelled	152,000
<hr/>	
Leaving to manufacture	273,250
Practically finished January 21	188,250
<hr/>	
Leaving to weave	85,000

or less than three weeks' production. Five or six months' work on which we had counted had vanished over night, as it were, and there was no market at any price for goods on hand or any signs of immediate orders for new goods. Our situation was typical of general conditions in all the textile mills of Lawrence.

It was just at this critical juncture that we were faced with the demand from the local branch of the Textile Workers of America for the adoption of a 48-hour week, to be inaugurated February 3, 1919, in place of the 54-hour schedule which had been in force since 1912. The demand immediately raised the question of cost as depending in part upon wage conditions.

During the period I have referred to, that is the "war period" beginning with January, 1916, wages in all the textile mills had been advanced on seven different dates, as follows:

- In 1916—on January 3, April 17, and December 4.
- In 1917—on April 3 and October 8.
- In 1918—on March 25 and June 17.

These advances had been so applied that the lowest paid workers received the largest proportion of increase. The result was that in our mill, which again may be taken as typical, as compared with wages paid January 1, 1916, our workmen

received, by classes based on skill, percentage increases as follows:

Highly skilled	86 per cent increase.
Medium skilled	103 per cent increase.
Unskilled labor	116 per cent increase.

The average rate of advance during the period was, therefore, over 100 per cent.

As bearing on the charge of "starvation" wages made in connection with the present strike, this consideration appeals to me as pertinent. Assuming a reduction of about 11 per cent in weekly earnings, which corresponds to a loss of time incident to substituting a 48-hour for a 54-hour week, still it is to be observed, upon reference to the figures cited, that the wage-earner receives for the shorter week as much as he did at any time prior to June 17, 1918, for the longer working unit. In other words, he retains the benefit of six out of the seven war period advances while working six hours less per week.

I have in mind also a relative fact attested to by every bank man in Lawrence. During the months of November and December, 1918, and the first month of the new year, savings deposits in Lawrence banks increased over \$2,000,000. Now the field of Lawrence banking is very limited, being confined almost entirely to the city itself and two small adjoining municipalities. The increased deposits certainly represent local savings by local people. Is this consistent with the idea of inadequacy of living wages?

Finally, it is a matter of statistical record that mill operatives in Lawrence are as highly paid as like operatives in any other large textile center in New England, or as employees of any other staple manufacturing industry in the same geographic area. Preliminary figures of an inquiry being undertaken by the National Industrial Conference Board into hourly earnings of men and women in eight representative manufacturing industries show that in 1918 in the wool manufacture men received an average wage of 42.7 cents an hour or an increase of 97 per cent over 1914, the third highest recorded, while women in the wool manufacture received 33.7 cents an hour, or the highest rate in the entire list. This comparative table of hourly wages is as follows:

AVERAGE HOURLY EARNINGS IN 8 INDUSTRIES FOR THE THIRD WEEK IN
SEPTEMBER, 1914 AND 1918.

	MEN.			WOMEN.		
	1914.	1918.	Per Cent Increase.	1914.	1918.	Per Cent Increase.
Metal Trades	\$0.291	\$0.50	72.	\$0.154	\$0.318	106.3
Cotton (North) .....	.193	.387	100.5	.154	.305	97.5
Wool .....	.217	.427	97.	.194	.337	74.
Silk .....	.213	.415	94.9	.152	.274	80.
Boots and Shoes .....	.274	.446	63.	.184	.273	48.3
Paper .....	.227	.446	105.	.150	.291	99.
Rubber .....	.228	.411	80.5	.172	.306	78.
Chemicals .....	.236	.445	88.5	.121	.242	100.

In the presence of such facts, the burden is upon those who assert "starvation wages," or anything like such a condition, to substantiate the statement by something more than unsupported reiteration. The only color for the charge has been derived from isolated or small group cases of poverty and squalor. To anyone in any degree familiar with living conditions in any city, in any country, such casual phenomena are by no means necessarily indicative of low-grade conditions of employment. Sickness, sloth, crime and accident would bear this fruit of misery, even if all the gross earnings of the mills were distributed in the form of wages.

I have attempted to give some idea of the economic situation in the Lawrence mills, with respect both to production and to wage conditions, when, late in January, 1919, the demand for a 48-hour week was made upon us. A number of the mills at once took steps to ascertain the preferences of their own employees. A notice was sent or given to every worker in our mill. It was issued on January 23, 1919, and called for a meeting on January 25 to consider the demand of union labor that the mill should reduce from a 54-hour to a 48-hour work week, beginning February 3, 1919. Besides calling for a conference and suggesting a basis of representation of the several departments, the notice pointed out that the cut of six hours involved in the proposed change would

entail the loss of six hours' pay, and inquired whether, in this light, our employees favored the change.

A parenthetical comment may not be out of place here, as tending to show the disingenuous nature of much of the criticism to which the mills have been subjected. In the great strike of 1912, hours had been reduced by State law from 56 to 54 per week. The manufacturers assumed that the wage-earners had made their own computation, and realized that this action reduced all pay envelopes by two hours' wages for the week in which the reduction in time became operative. Surprise at this automatic reduction precipitated the strike, and more than any other one thing aggravated its initial bitterness. The workers, particularly the foreign-born, who then as now constituted at least 50 per cent of the textile operatives in Lawrence, felt as if they had been actually robbed.

It was precisely to avoid any such ground of misunderstanding in the present crisis that the Lawrence manufacturers in January, prior to consideration of the 48-hour week, pointed out to their employees the loss of pay consequent on the proposed reduction of time. Yet representatives of the strikers have brazenly asserted that this notice of resultant wage reduction was intended to "intimidate" workmen from ratifying the short week proposal! What the manufacturers were bitterly censured for failing to do in 1912, they have now been blamed for doing. The circumstance is worthy of the attention of investigators and students at a distance, if for no other purpose than to set them inquiring as to the methods of the strike propaganda.

The response to the invitation to a conference was one of very frank acceptance in our own case. Forty-four delegates, representing all departments of the mill, met me at the appointed time in a free discussion. The best of feeling prevailed, although our views were supposed to differ. Finally the delegates stood 37 in favor of the 48-hour week flat, while only 7 repeated the slogan "48-54", saying without other word of explanation that they did so under instructions. Other mills which did not resort to a conference yielded to the demand for a 48-hour week, assuming that

wages would be correspondingly reduced. It is to be borne in mind that neither at this time nor at any time before the workers quit, on February 3, was any demand made upon the manufacturers for an increase of the hourly rate of wages. The only demand was for shorter working time, and this was universally acceded to.

The Lawrence Central Labor Union and the United Textile Workers, with whom the demand originated, expressly advised labor that consideration of wages be disassociated from the time question. Not until the Saturday and Sunday immediately preceding February 3, and the actual walkout on the latter date, did any of the employees even by inference indicate that they intended to make higher wages, or the continuance of 54-hour wages for less time, a condition of returning to work. It was for this reason that when subsequently the manufacturers refused to refer anything to an arbitrator named by the strike committee, they could say with absolute truth and exactness that no question had been raised to which arbitration proceedings were applicable.

As I have said, prior to February 3, the mills in Lawrence adopted the 48-hour week. Every plant opened that Monday morning upon the 48-48 schedule. Over Sunday resistance had developed, and an active body of workmen, mostly foreign speaking, initiated the strike or walkout, and by usual methods of exhortation and picketing, not unaccompanied by threats and actual violence, deterred others from going into the mill gates. The measure of employment from that date to this is of significance:

Out of a population of between 90,000 and 100,000 there are in Lawrence about 32,000 mill operatives, of whom there were—

Employed January 25, 1919	31,198
Employed February 1, 1919	30,565
Employed February 8, 1919	15,468
Employed April 19, 1919.....	24,458

The strike spokesmen claim that there were 13,000 to 15,000 idle in the latter part of April. They produce no proof whatever, and they do not say how many of the unemployed

are out of work because of shortage of employment due to economic conditions described above. Neither do they allow for unemployment inevitably resulting from disturbances of the balance between departments in the mills. They are silent also about those who avowedly would return to work but for the intimidation, which has been long open and rampant. The manufacturers on the other hand have accurate records. Their conclusion is that not more than 5,000 men and women were out of the mills on April 30 on account of the strike; and that of these the greater part were either thrown out by the unbalance of operations incident to the unequal bearing of the strike upon different departments, or were kept away by fear of violence.

Neither time nor space permits me to go at length into the demonstrative aspects of the strike, nor am I as a manufacturer more qualified to describe the lawlessness and violence which have accompanied it than is any other observer. Houses occupied by workmen not in sympathy with the strikers have been dynamited. Incendiary fires, stimulated by the free use of kerosene oil, have been made use of as a means of intimidation. Brick throwing, smashing of mill and tenement house windows, and hostile picketing about the mills, have been of common occurrence. The strike sympathisers assert that the police have been unduly rough in handling the situation, and that provocation to violence has arisen from this source. This is denied by the police, who say that control of the situation depends upon prompt and decisive action, and that they have not exceeded the bounds of discretion in frustrating the various attempts of the strikers to hold parades and mass meetings, or to do some other forbidden thing which if unchecked would lead to further disorder.

The vast majority of citizens in Lawrence, who have no direct interest in either extreme of labor disputes, are saying that the fault lies with a minority of the workmen, who are chiefly of foreign lineage and difficult of assimilation. They believe that the incentive to violence comes from outside agitators, who look upon Lawrence with its polyglot population as a ripe field in which to experiment with strike methods, and to propagate social and political theories which cannot be

tolerated in America. These views have not been given publicity by those who have written up the situation for publication. In 1912 the sympathy of the public, which was undeniably with the strikers, was referred to by every writer and speaker who made the strike his text. It would be a matter of comment that apologists for the present disturbance have taken no census of public opinion, and do not lay claim to its support, if their reason for failing to do so were not apparent.

Before bringing to an end what I fear is for present purposes a somewhat lengthy statement, permit me one more diversion. In the last paragraph I have referred to the foreign-born as forming the nucleus of the discontented group. Let me not be misunderstood. Speaking for myself, I have no sympathy or patience with those sweeping generalities which disparage the alien-born as a class. For many years at least half the working force in our mill has been of foreign birth. Frankly, I like them. Without making or suggesting comparisons, I have come to regard them, generally and usually, as loyal, willing and thorough. I feel, however, that they labor under extreme disadvantage in certain respects, which they themselves undoubtedly recognize.

Imperfectly educated, as they are, coming as a rule from surroundings ill-calculated to develop respect for existing institutions, they are further handicapped in their effort to assimilate American ideas by the barrier of a strange language. Quick, intelligent and affectionate as many of them are, these very concomitants of a mercurial temperament, coupled with group isolation in the first generation, tend to make these newcomers credulous victims of those whose interest in them is anything but benignant. They are easily led astray by false prophets. I speak advisedly and from the fullest knowledge when I say that the manufacturers of Lawrence are devoting constantly the most sympathetic thought to the problem of Americanizing these newer elements of our civic and industrial life. It is very difficult, particularly in times like the present, to convey this idea to them. But how to do so, now or at some later time, is recognized by the employer of labor today as one of his vital problems, or rather one of the problems which he shares with the community as a whole. To my mind

nothing would more surely hasten its solution than a realization on the part of the foreign-born that the manufacturer and the citizen of Lawrence are more truly his friends than are the agitators who make a business of disorder, and the propagandists of social and industrial anarchy.

There can be no mistaking the real character of the men who have essayed to lead the forces of disorder. As Secretary Wilson of the Federal Department of Labor declared before the Governors' conference in Washington:

"These recent strikes in Lawrence, Seattle, Butte, and other places are not industrial economic disputes in their origin, but are results of a deliberate, organized attempt at a social and political movement to establish Soviet governments in the United States."

Or as ex-President Taft has said:

"Lawrence is a battleground where the fundamental principles of our American society are at stake."

This is exactly the situation as it was presented by the committee of Lawrence manufacturers in its statement of April 27, 1919, to Governor Coolidge of Massachusetts. The manufacturers did not say that there was "nothing to arbitrate." They did not object to arbitration as a principle. But they did insist that they would never consent to arbitrate with defiant plotters and propagandists whose sinister purpose was to utilize the Lawrence situation as their accomplices unsuccessfully sought to utilize the troubles at Seattle and at Butte for the overthrow of American law and American institutions. "These men," the Lawrence manufacturers declared, "are irreconcilable foes of peace and ordered liberty. The autocracy to which their efforts lead is even more dangerous and hateful than that autocracy which our nation and its Allies have overthrown."

The Massachusetts State Board of Conciliation and Arbitration, after making a careful investigation of all the conditions at Lawrence, said in its report to Governor Coolidge:

“Evidence tended to show that while a majority of the strikers were not in sympathy with lawless acts of violence, a considerable number was given to rioting and acts of intimidation, assaults and defiance of lawful authority, as appeared by the police records introduced in evidence. This condition, which still persists, was in large measure the result of speeches by some agitators from other cities and the distribution of literature in support of policies subversive of the rights of individuals and of private property and revolutionary in their tendencies, creating terrorism, preventing the resumption of work, disturbing the ordinary business relations of the community and destructive to orderly government.”

Thereupon the State Board of Conciliation and Arbitration recommended that idle employees return to their work in the mills and that the employees in each mill choose committees of their own number to represent them in any conferences with the manufacturers.

Public sympathy in Lawrence and the neighborhood, which in 1912 demonstrated that it was independent of any particular bias toward capital, has been overwhelmingly against the strikers in this case and in favor of the manufacturers. The employers have from first to last held the position that to deal with the self-appointed leaders of a non-representative, unorganized, fractionary group would constitute little less than an offense against the great majority of law-abiding employees, against accredited organized labor and against the general public whose interests should be the chief concern of both factors of industry. The situation in Lawrence has been one of embryonic social revolution, local, perhaps, in scope for the present, but unmistakably ominous in the light of existing world conditions.

Copy of call for conference :

TO THE EMPLOYEES
of
The George E. Kunhardt Corporation

LAWRENCE, Mass., Jan. 23, 1919.

We have received from the General Committee representing the textile workers of Lawrence and vicinity, copy of a resolution of the United Textile Workers of America, demanding a 48-hour week for textile workers, to go into effect on February 3rd next.

Nothing is said in the same about wages.

If this resolution means that the workers demand the same pay for 48 hours as for the present 54 hours, the demand is in essence for an increase of wages.

Higher wages mean higher prices for our product. High-priced goods are hard to sell, and if we cannot sell our cloth, we cannot make it. We can only pay wages from the proceeds of sales. If we cannot keep the mills occupied, both of us are out of work.

Now that the war is over, the cost of living should be reduced, and it certainly cannot be reduced if wages are to be increased or production materially decreased.

If the resolution means that the workers demand a 48-hour week at the present rate of hourly and piece pay, it would, of course, mean that each employee would earn less, in exchange for the comfort of working less.

The question whether a 48-hour week with reduced earnings for our employees would be for the advantage of employer and employee, for our interests are the same — is not now very material, as, owing to cancellation of Government contracts, we shall be unable for some time to run our mill as much as 48 hours a week.

We think there should be some way in which we can find out what you, our employees, want, and in which you can be informed of the conditions of manufacture, so that your interests and ours may be best conserved.

We think it would be for our mutual interest if you would arrange for representatives of all the present employees of this mill to meet with us and discuss this question.

While you should, of course, determine just how your representatives should be elected, we would suggest that the following departments have the following number of representatives, which bears a relation to the number of employees in those departments, and these should, as far as is possible, be representative of nationality.

DELEGATES FROM :

Wool Room.....	1	Finishing Dept., Wet Finishing..	2
Dye House	2	Dry Finishing.....	5
Carding Dept., Picker Room....	1	Shipping Department.....	1
Card Room	3	Designing Department	1
Spinning Department	3	Master Mechanic's Department... 3	
Yarn Department.....	1		
Weaving Dept., Warp Spooling ..	1		
Dressing.....	1		
Weavers.....	7		
Fixers	1		
Filling Carriers.....	1		
Mending	3		
			37

If the foregoing appeals to you and you elect representatives in this or such manner, as you desire, we will arrange to meet your representatives on Saturday morning, January 25, at ten o'clock, in our community meeting room adjacent to the main office.

GEORGE E. KUNHARDT,
President.

DESIGN IN INDUSTRIAL ARTS.

A MOST IMPORTANT FACTOR IN THE WORK OF
RECONSTRUCTION.

By RICHARD F. BACH, of the Metropolitan Museum of Art.

THE words industrial art imply the relation of art to industrial or mechanical production, which in daily parlance signifies the relation of appealing form and color to utility. They mean that usefulness, while remaining an essential objective, is shorn of its ability to contribute to cultural progress if it is not made sufficiently attractive to contribute pleasure to human environment. This relation between industry and art is embraced in the word design, a type of thinking that Americans have been too ready to let others do for them these many years.

While counting on mass production as a quick road to large figures on our national ledger, we have not been far-sighted enough to discover that mass alone becomes an obstacle in all articles which constitute our domestic surroundings, if a constant and consistently growing appeal does not form a part of its reason for being. The exact value to be placed upon the material and the design we have for many decades gauged incorrectly. The gloss of surface carving will not pass for design. The gimcrack assortment of motives which is the merest filmy cloak for the structural conception identical in all styles unless related to every guiding line in the piece; the gathering of suggestion repeatedly from books—and usually from poor books or designs themselves copied from others of their own ilk without recourse to originals—brings about a stalemate in design. Execution improves, design lags.

Execution, methods of manufacture, cannot supplant design: they can only facilitate design. Without design they serve requirements of utility only and might as well be diverted to merely mechanical objectives in which appeal to the mind through the eye or sense of touch is the least consideration. Objects of industrial art without an adequate in-

spiration in design serve their function as well as a piano played when out of tune.

American business men are known to be shrewd, yet their shrewdness is sometimes too momentary in its application. In the great field of the industrial arts commanding an outlay of \$500,000,000 each year these very business men have not taken thought for the future. They wait for the designers that Europe has recalled, they lament the fate of American furniture, and turn around to make just what they have made before with a minimum improvement on the plea that design is too expensive, whereas correct reasoning would show that good design is an investment costing less than any other single factor in industrial arts production when considered in terms of ultimate cash returns.

There is but one help for manufacturers in the industrial arts field—only one: education. They must educate designers, they must establish schools for training designers, they must realize that design is a cash asset, an all-for-business investment in every piece they turn out, in every yard of goods they print or weave. They must appreciate that design does not mean “fancy” pieces or over-elaboration. In short, they must come to the conviction that design means quality and that good design commands a good price. Bitch is not mahogany; garish convolutions are not ornament. Refinement is the index of taste and taste is the keynote of American industrial advance. Education points out the difference between the artistic progress of France and the industrial art stalemate of America.

In many branches of life men have seen the salvation of their business enterprises in the training of those to whom they pay salaries. In the industrial arts field the voice of not one manufacturer has been heard in favor of schools to teach designers. Rather a million dollars for mass output to achieve large selling figures now than five thousand dollars toward a school whose human product will make the one million into ten within a few years. Rather hundreds of thousands of inferior designs to serve as drugs for American taste than a few hundreds of high quality designs that will gain for us the international respect without which our product will com-

mand no price abroad. Rather self-seeking individual factory output than unified patriotic endeavor for the good of America.

Schools we must have—in every branch of industrial art production we must have school training as a feeder for the factory of the future. Designers will surely always come up from the ranks, but if there are potential designers in the ranks of factory hands, they deserve the chance to make the journey toward a designer's salary by the line of least resistance. The school is a part of the factory and the fact that it is not under the same roof with the machinery of production does not alter this truth. To hesitate to train designers to turn out the best for the American market is to waste material, to waste effort, to waste money, to waste the precious time which we have lost in depending upon Europe so long.

To the manufacturer we say: The schools you help to found now will not thank you for your patronage, for you will be doing yourself a favor in contributing to their support. In founding schools you are simply putting money in bank. They will return many times your cash investment. They will bring you designers capable of raising American standards to an eminent position among nations. Is it worth while to help yourself? Is it worth while to help your field of production? Is it worth while to help America?

By all means let education do the job—let “schools, schools, always schools” be your slogan, and let us have these schools now. Every day lost is a handicap. If you have faith in the future of American industrial art, build for that future. Do it now.

And while the schools are being put under way, the educational values of museums must not be ignored. Practically all of our museums maintaining collections in any of the industrial arts fields have made many efforts to reach designers, to appeal to manufacturers, to establish the business value of design. To develop design without the use of the museum is to study chemistry without the laboratory.

Thus the Metropolitan Museum of Art of New York is a large central laboratory for the designers and manufacturers of the metropolitan district. In fact, its lines of effort reach

to remote corners of the country.¹ It maintains lending collections of many kinds—photographs, lantern slides, maps, charts, actual samples of textiles and laces, casts, and even post cards. It distributes annually many thousands of photographs which are used directly for working up designs in the designing rooms of industrial arts producing plants, the cost of such photographs being so nominal a consideration that that department of the Museum is constantly overworked. In the Museum building it maintains enormous collections of direct value to men in practical fields, a convenient textile study room, ten thousand samples of textile art of all times, many costumes—this much in the textile field alone. The entire collection of industrial arts objects embraced under the general title of decorative arts numbers fifty thousand. There are published a large number of bulletins and leaflets describing the work of the Museum in the educational field. These are widely distributed in many thousands each year.

There is maintained a docent service involving the entire time of three Museum instructors engaged in bringing home to visitors of all kinds and classes the value of individual pieces or of entire collections. There are given annually several courses of public lectures. There is maintained for the benefit of manufacturers, designers, craftsmen, and artisans a special department in charge of an experienced chief whose office it is to make the collections directly accessible, to assist in finding suggestions, recommending developments in design, and, in general, in working out the direct influence of the finest things of all times for the greater good of American design in the present.

The Metropolitan Museum regards it as the sincerest form of after-the-war effort to contribute in this way toward the steady development of the arts of peace in anticipation of commercial rivalry during the reconstruction that will surely follow the world conflict. In Washington legislators have given thought to methods of steadying our lives now that the job over there is finished. They have foreseen that we must now prepare those counter weights which will help to bring us back to an even keel. Among those counter weights the arts

will play a leading part. In order that they may assist in making comfortable, convenient, and attractive the environment of our returning fighters, in order that they may assure the predominance of America in the industrial arts producing field, manufacturers must give thought to the education of designers. They must build for the future. They must found schools and profit by the splendid efforts of our great museums. For New Yorkers, the Metropolitan Museum offers advantages unequalled by those of any public institution devoted to educational purposes beyond the public schools themselves.

JAPAN AS A COMPETITOR.

A REMARKABLE EXPANSION OF WOOL MANUFACTURING
IN THE ISLAND EMPIRE.

By WINTHROP L. MARVIN.

THAT Japanese cotton mills are more and more possessing themselves of the markets of the Orient is an economic fact familiar to America and Europe. But it is only recently that Japanese woolen mills have come to be regarded as a possible factor in competition. It is the great war that has brought about this expansion of the Japanese woolen industry. Even before the war the wool manufacturers of Nippon were steadily increasing their capacity, buying wool principally from Australia and adding to their machinery as skill and experience developed.

Until 1877 there was no wool manufacturing establishment in the Japanese Empire—that is to say, no plant equipped with modern machinery. But in that year the Japanese government, in order to secure uniform fabrics for its army, caused what is now known as the Senju factory to be created. For many years this was a government monopoly, absolutely controlled after 1890 by the War Office. The Tokio Woolen Company was formed in 1895 and the Nippon Woolen Company and the Osaka Woolen Company a year later. Japanese mills have been relatively most successful in the production of the lighter fabrics known as mousseline de laines, and to this work apparently the major part of Japanese woolen machinery is devoted. In the year 1907 as many as 23,775,256 yards of mousseline de laines were produced in Japan. This production steadily and rapidly increased, while imports declined and exports grew, as follows:

Years.	Production.	Imports.	Exports.
	<i>Yards.</i>	<i>Yards.</i>	<i>Yards.</i>
1907	23,775,256	5,879,399	238,125
1908	27,445,097	7,515,894	354,614
1909	37,877,846	7,532,561	528,155
1910	43,953,021	3,364,725	668,046
1911	49,381,863	3,405,583	448,546
1912	54,755,577	340,500	688,523
1913	69,584,555	158,972	759,996
1914	50,346,524	90,558	584,249
1915	60,084,090	123,308	4,607,286
1916	43,548,020	1,083	7,085,690

Thus it is manifest that in these lighter fabrics Japanese mills came to dominate the domestic market, and sold considerable quantities of goods to India and other countries. The mousseline de laine mills of Japan include concerns of substantial size like the Tokio company with a paid-up capital of \$1,250,000, the Jyomo company with a capital of \$2,000,000, the Toyo company with a capital of \$1,250,000, and another concern with a capital of \$3,125,000.

The Japanese serge manufacture has not grown so markedly as the production of mousseline de laines, but it has come to be a considerable industry. Records of its production, imports and exports are contained in a valuable study of the Japanese woolen industry that has just been prepared by the far eastern division of the Bureau of Foreign and Domestic Commerce of the Department of Commerce, to which we are indebted also for other statistics. The serge summary is as follows:

Years.	Production.	Imports.	Exports.
	<i>Yards.</i>	<i>Yards.</i>	<i>Yards.</i>
1907	818,589	11,415,925	.....
1908	1,278,004	5,995,616	.....
1909	899,799	7,946,184	.....
1910	867,552	12,464,213	.....
1911	841,176	13,691,955	.....
1912	5,383,131	9,180,928	266,973
1913	9,754,855	14,496,576	141,907
1914	9,247,215	11,803,975	397,965
1915	6,442,498	3,671,664	6,668,042
1916	6,171,353	3,767,438	2,359,882

In serges as in mousseline de laines, Japanese production was severely affected in the year 1916 by the restrictions which the British government had imposed upon the export of raw wool from Australia. Supplies of Australian wool were not absolutely cut off by Great Britain from her Oriental Ally, but were reduced to an inadequate figure. Two of the serge manufacturing establishments of Japan are large establishments—the Tokio Keori, with a capitalization of \$3,700,000, and the Nippon Keori, with a capitalization of \$3,875,000.

As to the blankets, flannels and heavier woolen cloth produced in Japan, the cloth output has shown a great gain on the whole, while flannels and blankets show broad variations, as follows:

Years.	Flannel.	Blankets.	Woolen Cloth.
	<i>Yards.</i>	<i>Pounds.</i>	<i>Yards.</i>
1907	4,542,449	6,631,697	1,422,284
1908	259,420	475,411	1,275,114
1909	724,295	414,355	352,916
1910	544,740	377,900	876,832
1911	1,822,903	676,064	1,612,214
1912	1,125,283	779,611	994,377
1913	3,654,933	476,948	1,785,291
1914	3,381,793	459,489	2,022,529
1915	1,247,382	1,802,313	5,900,866
1916	1,627,302	523,961	6,927,680

It is estimated that altogether Japan has about \$50,000,000 invested in wool manufacturing and distribution. Records are in existence of the total value of the production and of imports and exports of Japan, but discrepancies exist in these returns which prevent them from being accepted as entirely dependable. As fair an estimate as any of the total woolen goods production of Japan can presumably be deduced from the records of imports of raw wool into Japanese ports, as follows:

Classes.	1913.		1914.		1915.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Sheep's wool:						
Tops	9,149,735	\$5,388,461	8,196,304	\$4,797,104	5,182,497	\$3,092,194
Other	11,610,024	2,610,343	12,635,649	2,594,794	52,534,348	12,199,930
Goat's and camel's hair . . .	224,729	21,443	201,343	16,586	657,204	73,956
Woolen or worsted yarns:						
Worsted	7,287,319	5,029,561	3,134,823	2,053,380	319,761	199,672
Other	24,473	13,888	27,569	16,705		
Mixed yarns of cotton and wool	72,632	36,251	91,324	39,681	8,964	4,751
Total	28,668,912	\$13,099,967	24,287,012	\$9,518,250	58,702,774	\$15,570,503

Classes.	1916.		1917.		1918.*	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Sheep's wool:						
Tops	5,978,140	\$4,223,911	5,767,128	\$6,163,470	3,163,657	\$5,256,445
Other	40,870,089	12,529,438	47,070,792	19,892,773	44,255,712	22,463,419
Goat's and camel's hair . . .	212,284	19,953	610,571	133,842	1,509,881	616,601
Woolen or worsted yarns:						
Worsted	870,904	724,130	377,548	384,600	75,189	120,653
Other	1,605	1,066	1	4		
Mixed yarns of cotton and wool	21,905	14,543	37,289	33,117	4,453	4,723
Total	47,954,927	\$17,513,041	53,866,329	\$26,607,806	49,008,892	\$28,461,841

* Figures are for January to November only.

Most Japanese woolen mills were originally equipped with machinery from Great Britain, much of which has been cleverly copied and reproduced by Japanese artisans. Not until the outbreak of the great war did Japanese mills receive any considerable amount of American textile machinery. Our exports of textile machinery to Japan for both the woolen and cotton manufacture reached a total of \$1,520,331 in the year 1918. War demands of the Japanese army, and in 1915 and 1916 of the Russian army, are the principal causes of the remarkable expansion of this new woolen industry. It is stated that Russian orders to Japanese mills reached an aggregate of 21,000,000 yards in addition to 4,000,000 yards furnished directly by the Japanese War Department. Of course, the war cut off all imports of German woolen goods, and the amounts which Great Britain could spare for her own Oriental markets were limited.

Japanese wool manufacturing wages are appallingly low as judged by either American or European standards. Men working as weavers in 1916 received only 25 cents a day and women only 16 cents. It is estimated that wage rates in the Japanese woolen mills have since increased about 50 per cent, but they are still in sharp contrast with American or European averages. It should be said, however, that Japanese labor in this textile art as a whole is relatively inexperienced and inefficient. It is even stated that an English girl could do the work of six Japanese girls. Most of the workers in the Japanese mills, as a matter of fact, are girls and women. These come to the mills from the lowest peasant class of remote villages of the interior, content to work as apprentices for nine or ten cents a day. They are totally devoid at first of all knowledge of the art, and are wholly unaccustomed to industrial environment. There is no doubt that they have been deliberately "exploited," for they are sent to the factories under a three-year contract with their parents. It is pretended that life in the manufacturing towns gives these girls valuable social and educational advantages. As a matter of fact, they are often kept locked up in barracks and work extremely long days. Few of these Japanese girls continue to follow the occupation. Most of them leave within a few years and are replaced by other beginners.

The Japanese people as a whole are an exceedingly poor people, with only the narrowest native resources. It is estimated that the national wealth in Japan per capita is only about \$250 as compared with \$1,250 in the United States. The burden of the national debt, even before the great war of 1914, was absolutely staggering.

But Japanese workers are accustomed to the slenderest diet and the barest facilities for comfort. As Professor Morimoto of the Imperial University states in his discussion of "The Standard of Living in Japan" (The Johns Hopkins Press, Baltimore), "For more than two thousand years the Japanese diet, generally speaking, consisted chiefly of cereals and vegetables, with some fish and a little poultry." "It is only during the last fifty years that the Japanese have begun to use meat." Even now the per capita beef consumption of the

Japanese people is only about one and one-half pounds a year. Rice is as it always has been the chief food of Japanese workers, who depend for their animal protein upon dried fish procured by the multitude of fishermen along the coasts and rivers of the Empire.

Japanese housing costs are simple; the clothing costs are exceedingly low except for those Japanese families that have sufficient means to provide for their men both European and native apparel. Substantially higher wages than those now prevailing could be given to Japanese workers in the wool manufacture and other industries, thereby securing more experienced and efficient workers, and still these wages would be relatively so low that if the Japanese possessed sufficient manufacturing equipment, American and European competition in the production of staple goods would be impossible. When new tariffs come to be made in the United States and in European countries, the potential rivalry of Japan will prove to be a unique and most difficult factor in the problem.

Though textile schools exist in Japan their graduates are said to find great difficulty in securing employment because of the racial habit of Japanese employers to retain men who have grown up in their service, even when better trained and more efficient workers are available.

It is acknowledged that the quality of Japanese woolen fabrics is not high—but the market as a whole does not demand quality. It is more interested in a favorable low price. The Japanese government in its Year Book urges that "In regard to cloth the industry is still in a primitive condition, owing to great technical difficulty in blending and mixing." Furthermore, it is urged that though in blend and figureless textiles some progress has been made, "even here the stuffs produced are hardly good enough to compete with foreign fabrics in the open market. Indeed, it is only as purveyors to the army and navy and the Railway Board for supplying stuffs used as uniforms, that our weavers barely justify their existence. They have not yet acquired sufficient skill to produce stuff for officers' khaki uniforms owing to imperfect dyeing."

Much of this, however, may well be taken with allowance. There is no particular reason why the Japanese, with their

artistic sense and tireless habits of industry, should not improve as they gather experience in the use of modern machinery. It is apprehended that the ending of the war may bring substantial imports of Japanese woolen goods into the American market at prices against which there can be small defense from the meager rates of the Simmons-Underwood tariff for revenue only. In many other lines of manufacture significant amounts of Japanese products are already being landed on our Pacific coast. The woolen industry of Japan will certainly bear watching, not only by America but by Great Britain and the commercial countries of the Continent of Europe.

Of sheep Japan at present has almost none in its crowded area. Where so many million human beings have to secure a livelihood from the soil there is scant room for general pasturage. Up to 1917 Japan is said to have possessed only about 3,000 sheep—an insignificant number, of no account whatever in manufacturing. But there were then importations of 2,000 or 3,000 merino sheep from Australia, and in the early months of 1918 three national sheep farms were established in the Empire. A maximum bounty of \$1.50 a head is being granted to persons buying sheep for breeding purposes. It is asserted that the hard wild bamboo grass which grows throughout Japan would kill the sheep if fed to them in quantities—so that food has to be cultivated for the flocks now maintained. This of itself is a heavy handicap upon the development of wool growing.

But in Manchuria and in Korea there are broad pasture lands where the outlook is more favorable and where merino, Shropshire and Southdown sheep have been collected. There are said to be in the Japanese area of Manchuria about 600,000 sheep and 750,000 more in Mongolia. The Japanese have been quick to realize the advantage, if not the necessity, of having free access to the raw materials of their own production.

THE WHITLEY REPORTS IN BRITAIN.

A MOVEMENT FOR MORE SELF-GOVERNMENT IN INDUSTRY
WHICH MAY HAVE SUGGESTIONS FOR AMERICA.

No industrial report or recommendation emanating from Great Britain, where labor is far more completely organized into unions than is the case in the United States, has ever aroused the interest in this country that has attended the reports of the so-called Whitley Committee—the British reconstruction committee on relations between employers and employees. These reports were four in number—the first relating to the creation of joint industrial councils in great industries where the employees were quite thoroughly organized. The second report urged the formation of trade boards for those industries in which labor was only partly or slightly organized. The third report dealt with works committees or shop committees, and a fourth report discussed the subject of conciliation and arbitration.

The Whitley Committee had full governmental authority behind it as a carefully selected board headed by Hon. J. H. Whitley, Chairman of Committees of the House of Commons. Both employers and employees were included in its membership of 15—representing railroad managements, shipbuilders, engineers, miners, the women's trade union league and general workers. One of the members was Professor Chapman of the Chair of Political Economy in the University of Manchester. Another was Mr. J. J. Mallon, the secretary of the National Anti-Sweating League. Reports of the committee were presented to the Minister of Labor in the Cabinet, and the recommendations of the committee have the powerful support of Premier Lloyd George and his colleagues.

However, there is nothing compulsory. The report contains recommendations and nothing else. It is carefully pointed out that there is no purpose to introduce a further element of State interference into British industry, for the formation of the industrial councils as well as the establishment of works committees must be principally left to the in-

dustries themselves. The purpose of these new factors in British trade is "to make and consider suggestions for securing a permanent improvement in the relations between employers and workmen, and to recommend means for securing that industrial conditions affecting the relations between employers and workmen shall be systematically reviewed by those concerned, with a view to improving conditions in the future."

These Whitley reports, of course, grew out of the great war, the government's appeal to labor and the restrictions placed upon labor in the crisis of a national emergency. During the war many of the regulations established by British trade unions had come to be suspended, but it has since been agreed that these shall be reestablished wherever the unions themselves desire that this be done.

There is no suggestion in the Whitley reports of a plan that has been academically debated in this country, of placing a representative of the workers on the board of directors of every employing corporation, to have a part in the business and administrative policies of the corporation. British labor is not insisting on any such proposal. All that the Whitley reports embody is an effort on the part of employers and employees under government leadership to lessen the number of strikes, lockouts and grave industrial disorders and to bring both sides to a frank recognition of their mutual interest.

It is the purpose of the Whitley Committee that the machinery which its report seeks to establish shall be so organized and compacted that there can be national industrial councils as well as district councils for the consideration of large measures of public policy affecting the industries. These have been described as follows:

1. The better utilization of the practical knowledge and experience of the workpeople.
2. Means for securing to the workpeople a greater share in and responsibility for the determination and observance of the conditions under which their work is carried on.
3. The settlement of the general principles governing the conditions of employment, including the methods of fixing, paying and readjusting wages, having regard to the need for

securing to the workpeople a share in the increased prosperity of the industry.

4. The establishment of regular methods of negotiation for issues arising between employers and workpeople, with a view both to the prevention of differences, and to their better adjustment when they appear.

5. Means of insuring to the workpeople the greatest possible security of earnings and employment, without undue restriction upon change of occupation or employer.

6. Methods of fixing and adjusting earnings, piecework prices, etc., and of dealing with the many difficulties which arise with regard to the method and amount of payment apart from the fixing of general standard rates, which are already covered by paragraph 3.

7. Technical education and training.

8. Industrial research and the full utilization of its results.

9. The provision of facilities for the full consideration and utilization of inventions and improvement designed by workpeople, and for the adequate safeguarding of the rights of the designers of such improvements.

10. Improvements of processes, machinery and organization and appropriate questions relating to management and the examination of industrial experiments, with special reference to coöperation in carrying new ideas into effect and full consideration of the workpeople's point of view in relation to them.

11. Proposed legislation affecting the industry.

Of course, a body like the Whitley Committee has had to receive and consider all kinds of ideas and suggestions, many of them more or less chimerical. But the committee has shown good judgment in adhering to lines of practical procedure, and it has "thought well to refrain from making suggestions or offering opinions with regard to such matters as profit sharing, co-partnership, or particular systems of wages, etc." "We are convinced, moreover," the committee declares, "that a permanent improvement in the relations between employers and employed must be founded upon something other than a cash basis. What is wanted is that the workpeople should have a greater opportunity of participating in the discussion about and adjustment of those parts of industry by which they are most affected."

To all appearances the recommendations of the committee have been well received by owners, managers and employees alike. If the councils as recommended are established, it is promised that the government will have it understood that the councils be recognized as the official standing consultative committees to the government on all future questions affecting the industry which they represent, and that they will be the normal channel through which the opinion and experience of an industry will be sought on all questions with which the industry is concerned. "It will be seen, therefore," the Minister of Labor says, "that it is intended that industrial councils should play a definite and permanent part in the economic life of the country. The government feels that it can rely on both employers and workmen to coöperate in order to make that part a worthy one."

Minister Roberts has addressed this appeal both to the leading employers' associations and to the trade unions of Great Britain. It is urged that the national industrial council should not be regarded as complete in itself; what is needed is a triple organization, in the workshops, the districts and nationally. Existing organizations of labor will be utilized wherever possible—for though labor unionism is strong in the United Kingdom it is not complete—many trades and callings still remain substantially unorganized. More women than ever have entered British industries on account of the war. Many of them still remain, and thousands of them are as yet beyond the membership of any labor unions. Relatively British unionism in numbers is not yet so strong as it was before the war began.

"Self-government in industry" seems to be the keynote of the Whitley movement. This does not mean participation of the employees in the actual management of any given business, so far as business policies are concerned, except in so far as this may be involved in the relations between employers and employees themselves. This "self-government," in which it is planned that the employees should actively participate, is essentially for the improvement of relations between employers and their workers. The Ministry of Labor has established a special department to give assistance and information

where it may be necessary in the gradual development of the new organization, and to collect and codify the results of the activities and experience of the industrial councils that have been formed or are coming into being.

Simultaneously with the Whitley reports the British Ministry of Labor has published the results of a comprehensive inquiry into the operations of the existing works committees in various trades throughout the United Kingdom. One of the typical works committees whose activities are described is that connected with the woolen and worsted manufacturing concern of Fox Brothers & Company, Ltd., of Wellington. This Wellington establishment is said to be one of the oldest wool manufacturing businesses in Great Britain—dating back to the seventeenth century. For nearly one hundred and fifty years this concern has been controlled by the members of one family, and several generations of the families of many of the present employees have worked in the mills. It is a fairly large concern, having a present number of employees of about 1,400.

It was on the initiative of the directors of the business that the Wellington works committee was organized in February, 1917. Each department in the concern elects its representatives roughly in proportion to the number of employees, and no one is eligible for membership on the works committee unless he or she has been at least five years in the service of the company. The right to vote is confined to employees of eighteen years and over. The composition of this works committee is as follows:

Department.	Number of Employees.	Number of Representatives.
Wool Sorters, etc.....	60	2
Worsted Spinning	212	4
Woolen Spinning.....	145	3
Weaving.....	591	10
Finishing	119	2
Dyeing	39	2
Washhouse	131	3
Mechanics	64	2
		<hr/> 28

Once a month these selected employees meet the directors and general managers of Fox Brothers & Company. If there is any loss of time to the employees it is paid for by the concern and any subject affecting the general welfare of the workers is in order. But there is this limitation, that questions of discipline or wages affecting individuals or departments must first come before the foreman or overseer of the department and then, if unsolved, before the manager or managing director of the concern. It is only questions that are not satisfactorily settled at this stage that can be submitted to the works committee and the directors as the final court of appeal. The purpose of this policy is manifestly to prevent a waste of time on details and to confine the committee to the consideration of larger policies.

It is stated of this wool manufacturing works committee that much of the discussion between the committee and the directors has been of an educational character. The directors have explained some of the principles underlying the administration of a large business—the effect of output upon standard wages and charges, and the like; suggestions for the more economical running of the business are encouraged. In the firm's opinion it is essential to the success of a works committee that the directors take the workpeople into their confidence. The workpeople must be made to realize that they can help the administration and must be asked and given the opportunity to help. Both sides are apparently pleased with the working of this experiment, but the principal advantage claimed for it is that by a thorough explanation to the workers of any new departure in the internal administration of the business, misunderstandings are avoided and the workpeople made to realize the real object of such departures. Moreover, the committee provides a safety valve and prevents resentment at any suspicion that the real grievances of the workers are suppressed before they can be laid before the directors of the company.

In this concern it happens that most of the employees are not members of any union—that only a small minority are organized in a general laborers' union. Undoubtedly both the employers and employees in this Wellington woolen mill

have an important advantage in the fact that they are of the same race, speaking the same tongue, and having facilities for communicating with and understanding each other that are not enjoyed in many of the wool manufacturing organizations of America.

Various experiences have been had by other works committees whose careers are described. Some of these works committees have failed and been abandoned—but on the whole the testimony of both employers and employees is favorable. It may have been with the experience of these British committees in mind that the Massachusetts State Board of Conciliation and Arbitration, which at the request of Governor Coolidge inquired into the recent strike of a part of the employees in the mills of Lawrence, laid great stress on the extension of the shop committee idea in the Lawrence mills, to the end that there might be more frequent and more frank communication between the workers and the mill management. It is the desire of the Massachusetts board that these shop committees be placed upon a more recognized and permanent basis. But it has been a standing principle with the manufacturers of Lawrence as elsewhere that the agents and other officials of the mills should be willing to meet and confer with their employees face to face whenever any grievance appeared to require such a gathering.

AN UNNECESSARY AND FUTILE STRIKE

HOW SIXTEEN WEEKS' WAGES WERE LOST FOR THE SOLE
BENEFIT OF A FEW ALIEN AGITATORS.

A SIXTEEN weeks' strike of a minority of the employees in the textile mills of Lawrence, Mass., caused by a demand from these employees, most of them non-English speaking, of brief residence in this country, for an increase in wages, following the establishment of a 48-hour week, is a matter of sufficient importance to make a record of it well worth while. In earlier pages of this BULLETIN certain significant phases of the Lawrence trouble are separately and very interestingly reviewed by a Lawrence manufacturer, Mr. George E. Kunhardt.

As described in the April issue of the BULLETIN the granting of a 48-hour week, in response to the request of the United Textile Workers of America, was received in a spirit of goodwill by the employees of Fall River, New Bedford, Lowell, and other textile manufacturing centers of New England. The workers in these other communities, and a very great majority of the workers in Lawrence, understood that the business situation attendant on the armistice and the readjustment of industry from war to peace was not favorable to an increase in wages, in addition to a shortening of the work week and a consequent increase in the cost, and a reduction in the volume, of production. This manifest fact was comprehensible to the native-born employees and to workers from other countries who had been resident here long enough to grasp something of the spirit of American institutions. But under the leadership of a self-constituted committee, composed chiefly of persons outside of Lawrence, a part of the non-English speaking element in the mills demanded higher wages and kept away from their employment. This strike began on February 3 and it lasted until May 21, when those of the strikers who remained out met and formally declared it ended.

Though the number of strikers had constantly lessened from the beginning of the trouble, though some of the mills

had nearly a full complement at work, and though only one mill was closed and that voluntarily, by the direction of its managers, so many sensational episodes accompanied the strike that it again attracted to Lawrence the attention of the country. It is, therefore, essential that the facts in the case should be set down for reference hereafter. Of course, professional anti-American agitators from other centers, notably New York, flocked to Lawrence to utilize the situation to inflame the strikers against existing law and society. Their harangues produced a certain effect upon a part of their followers, and grave disorder developed. One result was the building up of an organized system of intimidation of employees who remained at work—having no sympathy whatever with the aims of rabid propagandists. These loyal employees were insulted and threatened by mobs of strikers on the streets. They were assaulted in their homes. Fires were set and finally the dwellings of some workers were attacked by dynamite. It was necessary to enlarge the police force of Lawrence by drawing policemen from neighboring towns. No troops were sent in because this did not seem to be required. But the Lawrence police, after having been murderously set upon again and again by overwhelming numbers, procured a machine gun, manned by ex-soldiers, which, without firing a shot, exercised a notable moral influence on the foreign rioters.

Public sympathy in Lawrence ran strongly against the strike. A general citizens' committee was organized to assist in the maintenance of law and order. The leading clergymen of Lawrence spoke wisely and vigorously from their pulpits. Early in April Governor Coolidge of Massachusetts asked if the trouble was of a kind that could be submitted to arbitration. The strike leaders, who were then almost at the end of their career, with funds failing and their followers daily leaving them, eagerly welcomed this opportunity as an expedient to revive their cause. But the Lawrence manufacturers, after carefully considering the Governor's suggestion, replied that "although they are always ready to meet and confer with their own employees in any ordinary industrial dispute, they cannot agree to leave to arbitration an issue like that now

presented, which, in their judgment, menaces not only the future of the textile industries of our Commonwealth but the very foundations of our American form of government." They added that they would prepare a fuller statement of their case as soon as possible, "in order to place the matter in the clearest light before you and their fellow-citizens." Before waiting for this statement, however, Governor Coolidge requested the State Board of Conciliation and Arbitration "to proceed forthwith to investigate and report on the present controversy at Lawrence."

STATEMENT OF THE MANUFACTURERS.

In their statement to the Governor the Lawrence manufacturers reviewed the entire case as follows:

For a clear understanding of the strike that now affects about one-fifth of the employees of the textile mills of Lawrence it is necessary to go back to the month of January last, when the request of the United Textile Workers of America, affiliated with the American Federation of Labor, for a reduction of the working hours from 54 to 48 per week was formally presented to the manufacturers and granted by them.

The great war had been suspended on November 11, 1918, by the signing of the armistice. At that time more than 50 per cent of all the wool manufacturing machinery of the United States, and probably 70 per cent of that machinery in Lawrence, was engaged in producing army and navy fabrics for the government. Immediately on the conclusion of the armistice the war and navy departments ceased to place new orders, and readjusted or cancelled all orders that were not too far along toward being fulfilled. All the raw wool stocks in the United States were in the possession of the government, which had bought them at war prices, and until these prices could be properly scaled down to the world-level and the wools disposed of to manufacturers, there was no hope of any considerable demand for civilian cloths.

That is to say, this request for a 48-hour week came at a peculiarly difficult and anxious period, when the outlook was exceedingly dark for American wool manufacturing. Government war business had ceased; civilian peace business had not yet developed; on February 1, as the official records showed, fully 50 per cent of the machinery of American woolen mills

was idle. A shortened work week meant less production from elaborate and costly machinery, and higher costs, even though the same hourly rate of wages was maintained.

ACCEPTED ALL THE WORKERS ASKED.

Nevertheless, the manufacturers met their employees in a frank spirit and accepted the 48-hour basis, which was all the United Textile Workers asked. On February 3 last the 48-hour week went into general effect at Lawrence as well as at Lowell, Fall River, New Bedford, and other textile centers of the Commonwealth. In all these, with the exception of Lawrence, there has been no serious difficulty. Nor has there been any trouble with four-fifths of the workers at Lawrence.

Some of the mills there now have all the people they can employ. In others the ranks that were scant at first have been steadily filling. In published statements and in direct conferences with their workers the Lawrence manufacturers had clearly explained all the conditions of the change of hours, so that nothing could be misunderstood.

The chairman of the community labor board at Lawrence reported on April 2 that there were 24,669 persons at work in the local mills, out of an average accustomed total of 32,000, and that the number at work was steadily increasing. It is now put at 25,500. Men who know Lawrence best assert that 70 or 80 per cent of the 6500 now idle are eager to return to the mills at once, and would do so if the law could suppress the intimidation to which they are subjected.

Let it be borne in mind that since January, 1916, there have been seven voluntary increases in wages in Lawrence, in which the greatest proportionate advance was given to the lowest-paid workers; that these increases amount on the average to about 100 per cent, or far more than the simultaneous increase in the cost of living; and that the Lawrence workers are now receiving the highest level of textile wages paid in America or in the world. Since November 1, 1918, deposits in the savings banks of Lawrence have shown an increase of \$2,000,000—deposits that are now \$33,000,000 in all.

And let it be emphasized, moreover, that the great majority of the Lawrence mill workers, whether native-born or foreign-born, are most faithful, skilful, competent men and women, a credit to their city, state and nation, and that it is the willing judgment of the manufacturers that these workers deserve every dollar they earn.

QUOTES LLOYD GEORGE'S APPEAL.

These are the men and women fair and intelligent enough to appreciate the force of Lloyd George's recent appeal to the workers of Great Britain:

"There is a feeling that one way of providing employment is by reducing the hours of labor so that there will be enough to go round at the same wages. Reduce the hours of labor to what is fair, profitable and possible, but reducing the hours of labor merely in order to create employment, paying exactly the same wage, is one way to make unemployment in the whole country. I should have thought that stood to reason. It is so elementary. It increases the cost of a particular commodity and that commodity is an ingredient of something else. If you put up the price you diminish the purchasing capacity, and if you diminish the purchasing capacity you diminish employment. I despair if the working classes of the country do not recognize that elementary and fundamental principle, but I am sure that they do."

This great overwhelming majority of the workers of Lawrence who, whatever their birthplace, race or creed, have a true understanding of the American spirit, all appreciate that there must be co-operation between themselves and their employers for the welfare of both, and for the peace and prosperity of the nation.

It is not these but a very different, and a very small class that is endeavoring to wage industrial war in Lawrence. None of these assailants of law and order have any right to represent the honest cause of organized labor. In fact, organized labor repudiates and denounces them as its own worst enemies. As Henry J. Skeffington, commissioner of immigration at Boston, says:

"The Lawrence disturbance is one for the city and state authorities to deal with. It is a mob, nothing else. There is no real leadership. The labor unions—the United Textile Workers of America—called for a 48-hour week, and nothing more. That was a well-organized movement, and covered the textile industry all over the country. There were responsible heads to deal with and make agreements. But these fellows, some of these self-constituted leaders, are merely part of a general scheme to import into this country the ideas of the Russian Bolsheviks."

MOSCOW METHODS USED.

For a confirmation of this expert diagnosis, it is only necessary to review the actual methods of certain strike leaders in Lawrence. Under the guise of "picketing," the streets of

this New England city have witnessed scenes that recall the early days of the outlaw regime in Petrograd and Moscow. Trolley wires have been cut, and peaceable men and women on their way to work have been cursed, stoned, clubbed, shot at, terrorized, after the approved fashion of the Red followers of Lenin and Trotzky. They have been assailed with black hand letters threatening the burning of their homes and the mutilation and crippling of themselves and their families. Strike assemblages have rung with denunciation of our flag and government.

"Sell your Liberty bonds," shout these anarchists—"five years from now they won't be worth anything. There will be another government then! It is for us to show this country what Bolsheviks can do! It is not a question of dollars and cents—we are going to own these mills. We will take over these factories—or we will destroy them!"

As John Golden, president of the United Textile Workers, says:

"The Lawrence situation has been misrepresented. All the trouble there is due to a few Bolsheviks. They are still on strike, though in diminished numbers. The real workers will have nothing to do with them."

The officers of the Lawrence Central Labor Union denounce "these irresponsible I. W. W. Bolshevik parasites," and call upon "all patriotic residents" to "co-operate with the American Federation of Labor for the purpose of forcing the proper authorities to stamp out this pro-German Bolshevik propaganda."

Such declarations and protests of the actual, responsible friends and leaders of American labor might be cited almost indefinitely to demonstrate the true character and purpose of the Lawrence conspiracy. Baffled in Seattle and elsewhere, these plotters against our nation and its flag have turned to New England.

As Secretary Wilson of the federal department of labor told the Governors' conference of March 3 last in Washington:

"These recent strikes in Lawrence, Seattle, Butte, and other places are not industrial economic disputes in their origin, but are results of a deliberate organized attempt at a social and political movement to establish soviet governments in the United States."

None know the real Lawrence situation better than the devoted clergy of the city, the venerable dean of whom is the Rev. Fr. James T. O'Reilly, pastor of St. Mary's Church. At a meeting of Lawrence citizens in the City Hall, Fr. O'Reilly declared:

"There is no labor question in Lawrence today. The battle in Lawrence is a test for the whole United States on the question of socialism. The movement in Lawrence is that of the Bolsheviki of Russia."

AMERICAN PRINCIPLES AT STAKE.

Men who know the situation face to face are all agreed in thus interpreting it—the clergy, the citizens' committee, the responsible leaders of the Federation of Labor. Well has ex-President Taft declared that "Lawrence is a battle-ground where the fundamental principles of our American society are at stake."

The manufacturers of Lawrence are not willing to recognize a practically self-appointed committee of outsiders whose sinister purpose is to utilize the Lawrence situation, as their accomplices unsuccessfully sought to utilize the troubles at Seattle and at Butte, toward the overthrow of all that makes for the safety and honor of the American republic.

To sum up—The 48-hour week, which was the only request of the United Textile Workers, in Lawrence or elsewhere, has been completely granted. Four-fifths of our Lawrence employees are at work; their number is increasing. We are convinced that most of the remaining one-fifth would gladly return to the mills if protection were assured them against the violence of a relatively few plotters and propagandists, who are making in Lawrence what we may hope is their last stand in America. These men are irreconcilable foes of peace and ordered liberty. The autocracy to which their efforts lead is even more dangerous and hateful than that autocracy which our nation and its allies have overthrown.

For the reasons stated, we respectfully submit that there can be no arbitration between Americanism and Bolshevism—and this, as we see it, is the fundamental issue involved in the Lawrence situation at the present time.

Governor Coolidge declared that in his judgment the serious violence that had characterized the Lawrence strike made absolutely necessary an inquiry on the part of the Commonwealth. Promptly the Massachusetts Board of Conciliation and Arbitration, consisting of Hon. Willard Howland, chairman, Mr. J. Walter Mullen and Mr. Charles G. Wood, began the investigation, with sessions on April 14 and 15 in the Lawrence City Hall and on April 18 at the State House. These formal meetings were followed by further inquiries on

the part of the Board, which manifested an earnest desire to get to the heart of the problem. On April 28, having searched the matter thoroughly, the members of the Board presented a report to Governor Coolidge in which they officially confirmed the contention of the manufacturers that Lawrence conditions were not favorable to arbitration. They characterized the violence at Lawrence as "in large measure the result of speeches by some agitators from other cities and the distribution of literature in support of policies subversive of the rights of individuals and of private property and revolutionary in their tendencies, creating terrorism, preventing the resumption of work, disturbing the ordinary business relations of the community and destructive to orderly government." The Board went on to ask that the strikers return to work, and, having returned, to take up their case in peaceful, orderly fashion with the manufacturers.

Because the report of the State Board of Conciliation and Arbitration to the Governor is so concise and so significant it is quoted in full, as follows:

REPORT OF THE STATE BOARD.

In compliance with your request to investigate the controversy in the textile industry at Lawrence, the State Board held sessions of a public investigation in the City Hall of that city on April 14 and 15 and at the State House on April 18 and has since pursued its inquiry. The counsel for the strikers and for the employers were heard; representatives of the several mills affected were interrogated.

At the conclusion of the formal presentation of testimony offered by employers and employees, opportunity was afforded any person who desired to be heard. Counsel representing a citizens' committee appointed by the mayor presented witnesses and exhibits relative to the conduct of those on strike and those in sympathy with them. Several citizens volunteered testimony and opinions, all of which were received and made a part of the records.

It was disclosed by testimony at the hearing that, pursuant to a resolution adopted by the United Textile Workers, a request had been made to the employers prior to February 1 that a 48-hour week should be established in the mills of Lawrence. To this request the several corporations operating mills in Lawrence had acceded and given notice of the establishment of the 48-hour week, in some instances supplementing

the concession with printed and verbal notices that the shorter work week would reduce the earnings of the employees. A substantial number of the employees on February 3, acting apart from the established textile councils, declined to be bound by the original request and entered upon a strike to enforce a demand for "fifty-four hours' pay for forty-eight hours' work."

The 48 hour week and over-time work calculated at time and one-half, requested of and conceded by the employers in most textile centers elsewhere in the State, were established and accepted by a large majority of the employees and those who remained at work in Lawrence or have since returned to work in accordance with the plan advocated by those in charge of the initial request.

REQUEST FOR ARBITRATION.

Counsel for the striking employees rested the case for them on the statement that they demanded 54 hours' pay for 48 hours' work per week and that they were willing to submit the question in dispute to arbitration in accordance with terms outlined by Mr. Henry B. Endicott. The employers refused to join in such an arbitration, giving as a reason, in addition to those contained in a letter to you on April 10, that no responsible organization of employees existed that could be bound to comply with the terms of an award, and for the further reason that the employees then at work would not be parties to such an arbitration as would affect them because of its general application. It did not appear that the employers were opposed to the principle of arbitration as provided by statute as a method for determining a controversy not otherwise adjusted.

ACTS OF LAWLESSNESS.

Evidence tended to show that while a majority of the strikers were not in sympathy with lawless acts of violence, a considerable number was given to rioting and acts of intimidation, assaults and defiance of lawful authority, as appeared by the police records introduced in evidence. This condition, which still persists, was in large measure the result of speeches by some agitators from other cities and the distribution of literature in support of policies subversive of the rights of individuals and of private property and revolutionary in their tendencies, creating terrorism, preventing the resumption of work, disturbing the ordinary business relations of the community and destructive to orderly government.

The question in dispute is the wages involved in six hours of labor not performed. The Board has not attempted to as-

certain complete evidence or information upon which to base a conclusion relative to a change in wage. No investigation into the merits of this wage dispute can go forward with precision and fairness while the strike continues, nor can there be co-operation between the employers and all their employees when part of the latter are working and part are on strike. Work should be resumed in order that the employees may show the extent of their production, the skill required of them, and the conditions under which their labor is performed.

URGES MEN RETURN TO WORK.

The Board recommends that the striking employees return to work without prejudice and the employers receive them back without discrimination except those who have been guilty of violence or whose cases are pending in the courts. As the process of resuming interrupted manufacture requires time, it may not be possible to give employment to all employees at once, but this condition should be made known to the employees by conference and an understanding reached relative to the order in which the employees resume their former positions. After returning to work and normal working conditions are restored the employees in each mill should choose a shop committee to represent them in conference with the employer.

This committee should confer with the employer and secure his co-operation in an amicable endeavor to adjust any differences. If no agreement is reached fifteen days after the first conference, both parties should jointly agree to submit the dispute to the arbitration of a board selected by them or to the State Board pursuant to the statute. If no agreement to arbitrate is entered into and the controversy still persists, either party or both parties should petition the State Board for an investigation for the purpose of ascertaining and recommending what is a fair wage for the work as there performed.

The State Board finds that no adequate method exists by which employers and employees can meet in conference for the purpose of discussing and adjusting matters in dispute of general interest to the industry. The creation of a general conference committee composed of employers and employees chosen by the employees in the several mills with authority to agree upon the establishment of general changes would be helpful to the parties in dealing with controversies that may arise in the future. The employers and employees are jointly bound by all rules of fairness to forthwith create and maintain a plan for the settlement of grievances, to the end that

the public of Lawrence and the industrial welfare of the State may be reasonably insured against a recurrence of strikes.

No marked result followed immediately upon the counsel of the State Board to the strikers to resume their work. But very soon an increased tendency to break away from their radical leaders became apparent among the non-English speaking people who saw their fellow-employees earning their wages week after week. Steadily the mill organizations were strengthening as the strikers in groups or larger numbers came back. But at this juncture a new factor appeared in the situation. Early in May the United Textile Workers of America and other organizations of mill workers in other cities and also in Lawrence, recognizing an improvement in general business conditions, asked for an increase of 15 per cent in wages. This request was presented not only to the wool manufacturers of Lawrence but to the cotton manufacturers of Fall River, Lowell, and New Bedford. After giving due consideration to the desire of their loyal workers, the cotton manufacturers agreed that a substantial increase in wages should be granted. A part of the textile machinery in Lawrence is engaged in the cotton manufacture, and it became necessary for the Lawrence manufacturers to give their own consideration to the request of the United Textile Workers and of similar established American labor organizations. Both cotton manufacturers and wool manufacturers agreed that a general increase in wages should be given because conditions had so changed that such an increase was justified and practicable—and because, therefore, the implied understanding with the loyal employees, that there should be a wage readjustment when the business skies brightened, should be carried out. This decision was announced on May 20 by the National Association of Cotton Manufacturers in Fall River and New Bedford, and this action was followed by the wool manufacturers of Lawrence, who made this formal announcement:

To the Citizens of Lawrence and to our Employees:

The Lawrence textile manufacturers desire to express appreciation for the spirit of loyalty shown by the citizens of

Lawrence, by our employees and by those public officials who have been charged with the enforcement of law and order during the recent attempt of agitators, mainly from the outside, to override the laws of the Commonwealth and of the nation.

The patience and confidence of our employees and the vigor of the people of Lawrence and vicinity in upholding the hands of the constituted authorities will do much to maintain for Lawrence a leadership in its branches of the textile industry, will promote the growth and betterment of the city and its neighborhood, and will vindicate the fair name of Lawrence for adherence to the principles of American ideals of citizenship.

When the reduction in working hours from 54 to 48 per week was established by the textile industries throughout Massachusetts it was with the tacit understanding that no wage adjustments should be considered at the time because of the exceedingly unsatisfactory business outlook resulting from the signing of the armistice and the cancelling of government orders.

Recently business conditions have so much improved that a readjustment and general increase in wages have become practicable. This increase will recompense those of our employees who in good faith and good will toward the manufacturers have remained at work, awaiting a favorable turn in the business tide. These employees have earned our gratitude, and we look forward confidently to a still more hearty spirit of co-operation and of mutual endeavor in the months to come.

The announcement was received with every evidence of appreciation and gratitude by the great majority of the Lawrence workers who, understanding the situation and trusting to the sincerity and friendliness of their employers, had remained at their posts of duty. Though it was impossible to take back at once all of the strikers who from fear or from choice had remained away from the mills, yet these people were re-employed as promptly as they could be fitted into the organization. The State Board of Conciliation and Arbitration in its report to the Governor had recommended that those strikers who had been guilty of violence or whose cases were pending in the courts should not be taken back—but the others who had been guilty of no overt act were received without discrimination.

In an editorial leader accurately summarizing the situation, the *Boston Herald*, under the headline, "The Lesson of Lawrence," said:

It is welcome news to the people of the Commonwealth that the sixteen weeks' strike of a part of the employees of the textile mills of Lawrence has now ended. When, on February 3 last, the cotton and woolen mills of Massachusetts generally granted the request of the textile workers for a reduction of the hours of labor from 54 to 48 a week, it was frankly explained by the manufacturers that with nearly one-half of their machinery idle because of a lack of civilian orders and of the cancellation of war orders by the government, no increase of wage rates was possible for the time being. In Fall River, New Bedford, Lowell, and other textile centers this statement was received in good part by the employees generally. Only in Lawrence was there any serious trouble, and even there this was confined to a relatively small minority of workers, who spoke and understood only foreign tongues and were relatively newcomers to America.

And in Lawrence itself there would probably have been no real disorder and no violence but for a group of "outside agitators," whose sinister meddling was so pointedly condemned by the Massachusetts State Board of Conciliation and Arbitration in its well-considered report to Governor Coolidge—meddling which the Board described as "subversive of the rights of individuals and of private property, and revolutionary in tendencies, creating terrorism, preventing the resumption of work, disturbing the ordinary business relations of the community and destructive to orderly government."

For several days the strike has been breaking; more and more people have returned to work. Revolutionary teachings and terrorism have signally failed in the Lawrence community. Meanwhile the business outlook has steadily brightened, and when yesterday the mills of Fall River and New Bedford proclaimed a substantial increase in wages, the mills of Lawrence were ready to go on with the rest.

There has been no serious interruption of employment for fully three-fourths of the workers of the city, native-born, naturalized or so long resident here that they know something of America, knew that there must be good business to justify higher wage rates, and understood the need of good will and co-operation between the manufacturers and themselves. These skilled people have not suffered, but a heavy loss has fallen on the poor foreign workers, who were intimidated or misled, and in default of wages have been forced to

draw upon their savings or upon contributions from outside. They are deserving of the deepest sympathy. The problem of Lawrence, like the problem of many another great industrial center, is fundamentally a problem of Americanization and of closer touch and a better understanding. This is the manifest lesson of Lawrence to manufacturers and employees alike.

It may be fairly said in completing this review of the Lawrence strike of 1919 that it was singularly without justification and without benefit—except perhaps to the self-constituted leaders who enjoyed a brief period of personal prominence and prosperity. But this prominence and prosperity of a few irresponsible propagandists from Europe, saturated with European prejudice and hate and utterly ignorant of American ways and institutions, was purchased at the terrible price of a loss of nearly four months of wages by poor foreign folk who of all workers could least afford the sacrifice. The strike ended with the so-called strike committee heavily in debt, unable to meet its obligations, and repudiated by the major portion of its one-time followers.

A right appreciation of the utter futility and waste of this strike on the part of those who participated in it is likely to be intensified as the people who have lost their work talk over their experiences with the wiser majority of workers who had confidence in the wisdom and fairness of the manufacturers. The advance in wages implied in the original understanding, that caused the loyal majority to wait until better times, was not hastened a single day by the action of those who quit their work on the sinister urging of the utterly selfish ringleaders of the strike. The strikers lost their work and lost their wages, and have nothing whatever to show for it—for the advance in wages would have come at the time and in the degree in which it did come if there had never been a strike at all. It came, because of a wide and substantial business improvement, to the cotton workers of Fall River and New Bedford, where there had never been any strike, before it came to the mills of Lawrence. This is a lesson which the more intelligent of the men and women who were misled into leaving their employment will not soon forget.

AFTER-THE-WAR EXPORTS.

PRESIDENT MUNN OF THE TEXTILE ALLIANCE EXPORT CORPORATION DESCRIBES CONDITIONS IN EUROPE.

UNDER the provisions of the Webb law, permitting co-operation of American manufacturers for purposes of export trade, the Textile Alliance Export Corporation, with executive offices at No. 45 East 17th Street, New York, has been established with the support of the American Association of Woolen and Worsted Manufacturers, the National Association of Wool Manufacturers, the Association of Cotton Textile Merchants, and the National Council of American Cotton Manufacturers. Mr. John R. Munn, who is the president of the Corporation, passed several months in the late winter and early spring in Great Britain and on the Continent, for the purpose of observing conditions and building up an organization in London, France, Belgium, Holland, and Scandinavia.

Speaking the other day before the Woolen Goods Exchange in New York City, President Munn gave a graphic description of foreign trade conditions as he found them. He said of his first impressions, "It was last February when we arrived with our little organization and undertook to get orders abroad. This market, as you remember, was hungry for business and we left here an atmosphere of pessimism, a good deal of depression here, a good deal of uncertainty. When we reached England by comparison it seemed as though this market was in a wild period of boom; they were so utterly depressed, so perfectly stagnant, so perfectly paralyzed, the conditions we left seemed peculiarly enthusiastic. They had had no new orders on woolen goods at all since the signing of the armistice, and mills which were capable of combing 6,000,000 pounds per week were actually putting through about 4,000,000 pounds and of that 2,500,000 were going into Government stock, and of the remaining 1,500,000 they were using a large part of it in old army orders, and they had the blues most decidedly."

But a certain improvement soon came. "In the period between February and May there developed in the West End trade in fine goods a very active spot demand. That demand arose from the demobilizing of officers of which there were many, many thousand, men of wealth and position, who had been in uniform for three or four years and wanted to get away from it and wanted to buy clothes, and so they went to the West End tailors in London and they ordered perfectly regardless, and it created a demand which was felt immediately in the mills in Yorkshire and reflected at once almost in the price of fine wools in the London sales. It called forth at once a premium on wools of high grade to meet this demand. The wools of lower qualities dragged along without any particular change."

Mr. Munn added:

I talked very often with Colonel Willey in charge of the wool supplies of the British army, and in February and March he was extremely apprehensive as to how they could lift the big quantity of wool existing both in Australia and England. Ships were standing in British harbors unable to find berths to unload their wool. Warehouses in London were choked and traffic conditions were so congested they could not move it through the streets. He thought that this problem was going to reach perfectly gigantic proportions, that there would be unprecedented supplies of wool, and his opinion at that time was that there would be a considerable slump in wool values. That opinion prevailed until the wool sales, I think, in March, and much to every one's surprise this West End demand had made itself felt and the mills paid a premium for the high class of wools,—that rather changed the whole trend of thought on prices, that also gave an inkling that business was going to be good and gradually confidence asserted itself and they have gotten under way.

On the continent they have not emerged yet from the depression which they have felt nor are they capable of supplying more than a small portion of their demands. They are ready and anxious to buy woolen goods and cotton goods in extremely large volumes. Throughout the Balkans and in France and in Belgium and in Germany and in Poland and in that part of Russia that is under the control of the Allies there is a tremendous void, and they only await the establishment of some satisfactory system of applying their credit

resources before they come into the market to purchase in very large quantities.

Now the first place where they would buy when they have established their credit resources would be in England, for they have been accustomed to buy there and they have found British prices sufficiently below American prices that they feel that they can get them there again and they naturally first go there to buy.

In making what comparison we could as between the American and British quotations we found our prices to be from 10 to 30 per cent below quotations made in March and April of British prices. Now that led us into some investigation as to what the probable basis of costs would be as between England and the United States. In that investigation we looked into three particular items of costs—namely, labor, supplies, and taxes.

We found that whereas the actual price of labor in dollars per week is still considerably below the American price, the individual efficiency of the British operator has degenerated to the point where an able workman can earn all he is entitled to earn, all he is allowed to earn by his union, by say Thursday evening, and if he had any incentive to spur his individual efforts on to high production he could increase his output 30, 35 or 40 per cent. The labor unions over there hold him on a basis of only allowing him to earn so much per week and the result is that he temporizes and loafes on the job and does not get the output of which he is capable. Now that fact is so well known in England that there is a feeling of intense bitterness against the labor unions who have inaugurated it and a feeling of utter hopelessness of being able to offset it, and British manufacturers fear very deeply competition from America. They decry the fact that there can be any competition from Japan but they do feel that American efficiency and the American workman are going to enable this country to produce goods that will compete with them.

The second item we looked into was the whole question of supplies and the primary question in that is coal. We found that the pre-war price at the mouth of the mine was 8 shillings per ton—about \$2 per ton (all manufacturers in England are dependent entirely on coal as a means of supplying power). The price has advanced from 8 shillings per ton to 28 shillings per ton mouth of the mine and that was before the miners were given an advance in wages and a reduction in hours, so the best information we have today is that the price of coal at the mouth of the mine throughout the British Empire is 32 shillings per ton—in other words, the price has advanced from \$2 to \$8 per ton. It follows, of course, that that has a

marked effect on the costs of production and it has an indirect effect through the price of machinery. They claim that it takes three tons of coal to make a ton of fabricated steel, so that where they had formerly a charge of three times \$2, or \$6 per ton, they have today as against that a charge of three times \$8, or \$24 for the fuel used in making a ton of textile machinery. The English manufacturer today feels that his costs of replacement or reinvestment are going to be as high if not higher than the American costs of replacement or investment and he is more despondent again.

Other supplies have advanced, notably in oil, but I could not get exact figures on what they were paying for oil. I do know that gasoline was selling in London at 91 cents per gallon for the use of pleasure automobiles. They had a 12-cent tax and they expected to take that off and get the price down to 79 cents per gallon.

Now there is a third factor and it is a factor which we have been inclined to look upon as temporary but which I feel will be a very important factor for a long period of years, and that is taxation.

England has had and has today a burden of 80 per cent taxes on profits. A superficial investigation of British finances shows that they must struggle for a period of years under very high taxation. The organization of their textile industry is what we might call horizontal, while the American is vertical—that is, the British wool comber is a unit—the comber never spins, but his entire interest is devoted to combing, and likewise the spinner never combs but his business is a distinct unit and he does only spinning, and the same applies to the weaver, so that you have the whole industry laid out in horizontal steps—the comber has a complete industry, he buys wool and combs it and if it is the rule for him to make a penny a pound on tops he must add 4 pence which he will pay back to the Government in taxes, so the spinner pays the combers excess profits taxes and his raw material is inflated to that extent. When the spinner makes his prices he must in turn put on 400 per cent more profit than he would ordinarily, in order to meet this excess profits tax, so that his excess profits tax is passed on to the next step in the industry and this goes on step after step throughout the industry so you have the 80 per cent excess profits taxes compounded five or six times. Now they are all amply aware of it and want to offset it as best they can. Mr. Chamberlain has proposed that the tax be reduced from 80 per cent to 40 per cent and he says that is the minimum he can see for a long period of years. They are face to face with a very real difficulty—this very heavy burden of taxation affecting the

actual costs of production. Some of the manufacturers told me there were movements on foot to consolidate these various horizontal steps in the industry, to get the combers and spinners, or the spinners and weavers combined. This, however, is in a more or less nebulous state and I know of only one combination that has been effected, in Manchester in the cotton industry.

Now there is another effect which would be beneficial as a result of a combination of these horizontal organizations and that is on labor. In these horizontal organizations as they are now laid out, they take the wool to the comber in one part of town, and after it is combed it is taken to the spinner in another part of town, and after he has finished it is taken to the weaver in still another part of town and then to the finisher in some other section of the town. Under the condition of very low labor costs and low cost of transportation which they used to have before the war it was perfectly feasible for them to have their wool combed in one part of town and have their tops loaded on the dray and carried across through the streets several miles to a spinning plant to have it spun and then reloaded and have it moved four or five miles and in some cases as much as twelve miles to another plant; but today when they have an 8-hour working day and the cost of feeding horses is enormous, that transportation between one plant and another makes just one more heavy burden to be carried on their actual costs of production. So our conclusion was that the old advantage in England's favor has been largely if not entirely offset and that we are today in a position of being more nearly on a basis of actual competition with them.

CONDITIONS IN FRANCE.

President Munn spent considerable time in France, and his description of conditions there was as interesting as his portrayal of conditions in Great Britain:

In France the policy of the Government is to maintain an absolute embargo on the importation of merchandise. This was done for reasons as they state to meet conditions which are threefold.

They had primarily to reconstruct their own industries, 50 per cent of which have been totally destroyed; that is, 60 per cent of the woolen industries were located in the occupied district and of this 60 per cent that capable of being reconstructed to continue production is 20 per cent, so we find that 80 per cent of 60 per cent has been destroyed.

In the Lille region it is very questionable whether they will ever come back. Formerly Lille was the center of a most important textile industry and they had cheap coal available at Lens, but that coal field has been so gutted and so destroyed by Germans it is very doubtful whether it can ever be brought back into production. I went there and I have seen the destruction wrought. The Germans even burned the timbers in the mines, with the hope and expectation that they would burn out and utterly destroy it as a workable mine, and after they had done all the damage they could in that way they flooded the mines and even in some cases opened up underground water channels and I was told it would be impossible to utilize the old workings, which means that to bring them back to production they will have to bore new tunnels with the additional expense of having to shore up these old workings. Now it is very questionable as to whether Lens will ever again be called a coal producing area. Now the textile industry in the Lille region which got its coal supply from Lens, having such an unfavorable outlook in the future for coal supplies, have questioned the advisability of going back there. Textile manufacturers who have seen their property destroyed wonder whether they should go back to attempt to set up their industry, or if they do attempt to set up their industry again if it would not be wiser to go down in the Rhone Valley where they can get coal supplies, and some people think it would be advisable to move down into the Rhone Valley, but they say the difficulties in the way of doing that and the cost of textile machinery and the cost of investments are so high that they doubt the advisability of attempting it. So I do not look to see France reconstruct her textile industry on any such basis as they had before the war—certainly not for a long period of years.

There is a very, very strong demand for textiles and they have hungry merchants and bankers over there who would buy huge quantities of goods if they could. France, in the year 1919, is capable of absorbing \$110,000,000 of cotton and \$90,000,000 of woolen goods, all of which they must secure from the outside world—they are not capable of producing it.

Now, as labor is being demobilized in France they must find employment, so will look to the textile industry to furnish part of it, and in view of the difficulties to be met in reconstructing the industry and the corresponding high costs of production they think it would be a further obstacle in the way of their progress in reconstruction to allow importation of goods at low prices from abroad, so they shut it out.

A third factor has to do with their exchange. The franc has taken a tremendous drop—from a normal of 5.19 to the

neighborhood of 6.50 to the dollar—and it is fluctuating over a wide range and it is a very difficult situation. The French Government believes if they bring in imports or give permission to draw on French banks creating obligations which may be outstanding for a year it will have a further effect on the exchange rate and they are most anxious to hold that in check, so France is maintaining an embargo.

The effect of that is particularly unhappy. With the shortage in textiles and France's inability to produce textiles to meet that demand we see sudden increases in prices with those who have supplies and daily bidding up of prices, even in the retail stores, so that the workingman in order to buy the necessities is obliged to pay perfectly outrageous prices, and the result is that he is in a frame of mind that is peculiarly unhappy.

How long they are going to persist in this policy we do not know. The attitude is that when the United States is ready to lend them a sufficiently great amount of money in the form of long-term credit, they will then permit the importation of goods, but it must be done in some very big and broad way, and they expect the bankers of this country and the people of this country to give them the financial mechanics to import the goods.

IN BELGIUM AND OTHER COUNTRIES.

Mr. Munn found Belgium in a very different state of mind:

They said, "Let everything come in. We will take the shock of readjustment, however severe it may be. We want to get the stuff in here, and we believe in our ability to go over the top if the people will work," and while Belgium is exhausted economically because of the long protracted period of entire cessation of commercial activity in exports or imports, they have entire good faith, and the end of Government control so early after the signing of the armistice has tended to promote confidence and set in motion again the channels of trade; but in order for them to maintain their position it means that the financial mechanics to take care of the trade must be furnished to them—their importers and exporters must have access to the market. There was a strong disposition to buy but no finances set up. The Guaranty Trust Company came over there to lend \$50,000,000 on which they demanded the guaranty of every bank in Belgium, and the merchant felt that he did not want to put up his credit if we would not give him any sort of open basis of doing business.

I had the pleasure of seeing Mr. Herbert Hoover as soon

as I got to Paris and he characterized the world situation in a very terse way. He said, "The situation throughout Europe is that all governments in Europe are extended while individuals are rich. You are perfectly safe in dealing with the individual, but he cannot deal with you because he cannot borrow in dollar currency for his use, so he cannot pay you in dollars and no obligation is recognized in dollars, so you can't deal with him at all."

Now Belgium has worked itself out to an extent, and our representative over there is getting a perfect flood of inquiries and orders, but they have been unable to keep pace with the advances in this market and I don't know that they will come to a full realization of the levels that exist here today.

The most acute shortage of all is in Serbia and Czechoslovakia, and in Roumania, Bulgaria, and all through the Balkans. Their need is perfectly desperate—we cannot conceive of the shortage that exists there. All of them have commissions in Paris and we talked with them all.

The Czechoslovaks, imbued with a spirit of national confidence, said, "We will get along with what we have got," and when I asked them what they had they said "Nettles," and they said until they could get machinery to rebuild their industries they were wearing the nettles. They are anxious to buy raw materials but they have no credit, and what resources all of these governments have have been pledged already to the United States Government for the sale of food to them, so that any of us in commercial life who want to do business with the Balkan countries will do it with a full understanding of their absolute shortage of financial security,—and they are simply in a perfectly desperate and hopeless frame of mind.

I saw the Roumanian Commission and they were very anxious to buy goods. We showed samples and they made a small selection which amounted to about a million and a half—and which might as well have been twenty-five or fifty millions so far as their desire to buy developed. I wanted to see if it was possible to arrive at any feasible basis of doing anything—they offered to pay us in Roumanian Government Treasury-Notes, payable in dollars at 6 per cent interest, drawn for two years hence. I went to our Government and saw Mr. Lamont and he said they were sorry but the United States Government funds were not available for commercial enterprises. Then I interviewed American bankers in Paris and they were unable to discount the notes, so we then tried the French bankers and they said, whereas they certainly would discount a portion or all of those notes for the French

manufacturers, they would not do it for the American manufacturers. American bankers in New York said they didn't want to handle this amount at this time for the textiles corporation, that they have a great big question on which they are now working to provide two or three billion dollars for export business to those countries. The whole situation is acute—the shortage is intense—intense almost beyond belief. I saw men who had cut off their cuffs and sewed them in the sleeves of their coats and had taken the rest of the shirt to make clothing for the children. They try to keep up a presentable appearance, but they suffer.

There is a potential buying power there, but when that power is going to be made available is difficult to estimate—it will depend largely upon our own willingness to finance it. If that can be successfully undertaken, I look for a demand that will overwhelm the world's production, that will come in and strike this country, and will strike the British and will strike every country with the strength of their demands for perfectly huge quantities of merchandise.

President Munn impressed upon the manufacturers in his audience that Europe presented a problem and an obligation for them, saying:

Now we have a very real problem here. Every manufacturer in the United States is very happily in a position of great independence. He also ought to have some obligation to meet this European situation, and we are endeavoring in the Textile Alliance Export Corporation to secure the co-operation of the American manufacturer by getting him to agree to put a portion, a small amount of the goods that he produces aside for shipment to Europe. This is not an easy thing to ask a man to give you a portion, in proportion to his machinery or output, of his goods to send to Europe, particularly when the demand has not yet crystallized, and the market over here is what we might call a "run-away-market," at the same time that intense need is over there—the demand is real—and we as an industry have got to take cognizance of it, and have got to be in a position to do what is expected of us.

Now, on a selfish basis, if we can get our goods over there at this time, when they must have them, with a view of Europe's greatly increased costs of production, I believe throughout the Balkans, in Holland, and Scandinavia—and even in France—we can set up a permanent outlet for our goods in the years to come that will be of very great value

to us. Whether you like it or not, we have got a real position in textiles to maintain and this demand which has come to us very suddenly and has hit us overwhelmingly must be met. Now, our attitude in the next three or four or five years, when Europe will take everything we can make, will put us on trial to see whether we are going to hold that business on an intelligent basis in the years to come.

The first things they have got to have—it goes along the lines of primitive necessities—first they must have life's necessities, and the first necessary is food. They had to have food, and we have shipped it to them, our Government has given it to them. The next in the list will be clothing, and following next after that will probably be housing material, and then will follow along agricultural implements, ordinary kitchen utensils, and the things that are necessary to human existence, and it will come down the line of primitive necessities.

Of course it may surprise you to know that the only demand in existence in Europe today is for luxuries. That sounds contradictory, but in all countries in all times there is a buying power among the people who have money, and they are never in a position where they cannot buy. Vast new wealth has been created over there, vast numbers have acquired wealth—people who formerly had experienced nothing more than comparative independence—now these new owners of wealth are buying diamonds by the thousands—real or artificial—and they have created such a demand for pictures and antique furniture, jewelry and precious stones, that the prices are three or four hundred per cent above anything that anybody ever dreamed of asking before. I was told in London that the demand for pictures and old paintings had become so intense and the prices had gone to such unheard-of heights, that dealers in this country who have in the years past imported so many old paintings from the British, were shipping these pictures back to England for sale.

Of course in the textile industry this has its effect in the intense demand for the finer qualities of goods.

There is a big accumulation of wool in the British Colonies, and the British Government is going to stay in the wool business until next September. There has been enough machinery destroyed in Belgium, in France, and in Poland to make it a little questionable whether the available machinery will be able to lift the supplies of wool. On the other hand, there is going to be such a big demand for woolen fabrics that the available machinery will probably be operated day and night, so that I think—by and large—the wool supply of the world will be lifted. Now; then, we have innumerable factors which

must be taken into consideration. For instance, the congestion in London is astounding. Wool bought in April by the French has not left the docks—some of it is still at the warehouse. The draymen work only 8 hours per day and are in the frame of mind of being almost willing to leave their carts standing in the streets when the 8 hours is up. Furthermore, the amount of wool which is in the country is inconsistently placed; there are great shortages in this place, and great accumulations in the other place.

There must be some co-operative basis where every manufacturer will set aside for Europe, under some satisfactory guarantee, a proportion of his machinery, just as he did for the United States Government when they demanded it of him.

Now, whether that will crystallize into action this fall I do not know, but I feel it will be demanded of us and we must be prepared to meet it. I feel that the credit situation will be straightened out, *when* is the question. I talked to one of the bankers on this National Committee, and of course it is a question of what Europe can offer in the form of security—they will pledge anything they have got to get credit. It is a question of how far our bankers can and will go in assuming this responsibility on the insufficient security which they have to offer.

Here our Textile Alliance Export Corporation can exercise a very important and particular function. I can foresee the time when our Government, or presumably our Government, or at any rate our bankers who are effecting this line of credit, will pick out a delegation to go to Paris, which will probably be the headquarters for this big committee, to deliver this merchandise, and if that time comes we want to offer through this industry this organization which we are creating and make it available for the channel of distribution.

WOOL STOCKS AND CONSUMPTION.

WOOL STOCKS.

THE April Bulletin contained a tabular statement showing the quantity of wool held by dealers and manufacturers at the end of each quarter beginning June 30, 1917, as reported to the United States Department of Agriculture, and the estimate of the equivalent quantity of greasy wool required to produce these amounts. This statement is continued below, and shows that while on December 31, 1918, the quantity so held was 272,062,440 pounds, at the time of this report it had been reduced to 211,527,978 pounds.

WOOL STOCKS, MARCH 31, 1919, AS REPORTED BY DEALERS, MANUFACTURERS,
AND THE UNITED STATES GOVERNMENT.

As Reported by 226 Dealers and 554 Manufacturers.	Held by		Total.	Estimated Equivalent Grease Wool.	Held by Government.	
	Dealers.	Manu- facturers.				Estimated Equivalent Grease Wool.
	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.
Grease Wool:						
Domestic	5,390,449	30,172,031	35,562,480		117,662,000	
Foreign	23,299,228	42,464,805	65,764,033		121,249,000	
Total	28,689,677	72,636,836	101,326,513	101,326,513	238,911,000	238,911,000
Scoured Wool:						
Domestic	2,827,247	5,816,949	8,644,196		9,675,000	
Foreign	5,124,319	7,836,945	12,961,264		25,782,000	
Total	7,951,566	13,653,894	21,605,460	43,210,920	35,457,000	70,914,000
Pulled Wool:						
Domestic	4,582,694	4,985,670	9,568,364		5,740,000	
Foreign	1,401,695	1,677,402	3,079,097		7,364,000	
Total	5,984,389	6,663,072	12,647,461	16,863,281	13,104,000	17,472,000
Total grease, scoured, and pulled				161,400,714		327,297,000
Tops	897,930	10,962,108	11,860,038	23,720,676	2,322,000	4,644,000
Noils	2,822,864	10,380,730	13,203,594	26,407,188		
Grease equivalent of all wool reported above,				211,527,978		331,941,000
Estimated greaseequiv- alent of all wool re- ported held by deal- ers, manufacturers, and the U. S. Govern- ment March 31, 1919,						543,468,978

With the report as of March 31 the Department has made a similar statement showing the total amount of grease, scoured, pulled wool, tops, and noils held by the Army and Navy. This has been included above with the stocks held by dealers and manufacturers, and thus is shown as nearly as possible the stocks of wool (grease equivalent) in the country excepting such quantities as are still in the hands of producers or not reported to the authorities. As no statement is at hand showing the stocks of wool in Government hands December 31, a satisfactory comparison of the amounts in the country at the date named is not possible. The imports of wool during the three months have been 135,139,713 pounds and the quantities reported consumed 132,462,821 pounds. These figures will give some clue to the supply available January 1, 1919.

WOOL CONSUMPTION IN 1919.

In the April number of this Bulletin was reported the quantity of wool consumed in the United States in the calendar year 1918: a quantity in "grease, scoured and pulled," amounting to 605,158,021 pounds, which reduced to its equivalent in the "grease" equaled not less than 741,718,131 pounds. This total confirmed the estimates of the National Association made during the year as to the quantity of raw wool required by American mills to supply the needs of this country and our armies abroad and in process of formation.

WOOL CONSUMPTION BY MONTHS.

The monthly record as reported by the Federal Department of Agriculture is continued below and includes the reports for March, April, and May, and is as follows:

MARCH, 1919.

Schedules sent to 598 establishments.

3 having 16 sets of cards and 8 combs reported too late for tabulation;

7 reported as using only tops, yarns, and wastes;

141 reported as using no wool;

447 reported wool used as follows:

In Grease.

In grease.....	23,170,584 pounds	=	23,170,584 pounds.
Scoured.....	4,515,757 "	=	9,031,514 "
Pulled.....	1,633,722 "	=	2,178,296 "
<hr/>			
Total	29,320,063 "	=	34,380,394 "

APRIL, 1919.

Schedules sent to 570 establishments.

5 having 22 sets of cards and 14 combs reported too late for tabulation;

9 reported as using only tops, yarns, and wastes;

102 reported as using no wool;

454 reported wool used as follows:

In Grease.

In grease.....	31,200,648 pounds	=	31,200,648 pounds.
Scoured.....	5,783,910 "	=	11,567,820 "
Pulled.....	2,175,387 "	=	2,900,516 "
<hr/>			
Total	39,159,945 "	=	45,668,984 "

MAY, 1919.

Schedules sent to 579 establishments.

5 having 21 sets of cards reported too late for tabulation;

5 reported as using only tops, yarns, and wastes;

72 reported as using no wool;

497 reported wool used as follows:

In Grease.

In grease.....	36,140,216 pounds	=	36,140,216 pounds.
Scoured.....	6,520,605 "	=	13,041,210 "
Pulled.....	2,424,013 "	=	3,232,017 "
<hr/>			
Total	45,084,834 "	=	52,413,443 "

The consumption of wool during the calendar year 1918, as shown in the last Bulletin, was 741,718,131 pounds in the

grease; in the seven months of this year the consumption thus far has been 278,068,116 pounds, or slightly over 37 per cent of the total consumption of the previous year. These figures indicate that notwithstanding the withdrawal of the governmental demands American mills are rapidly approaching normal conditions of employment.

Under ordinary circumstances the wool consumption of the United States is usually reckoned at from 550,000,000 to 600,000,000 pounds a year.

ACTIVE AND IDLE MACHINERY AS OF APRIL 1, MAY 1, AND JUNE 2, 1919.

AS REPORTED BY THE BUREAU OF MARKETS, UNITED STATES DEPARTMENT OF AGRICULTURE, TOGETHER WITH PERCENTAGES OF SAME GATHERED FROM PRECEDING REPORTS FOR THE CURRENT YEAR.

April 1, 1919.

Summary of Reports of 908 Manufacturers.

	Looms.			Sets of Cards.	Combs.	Spinning Spindles.	
	Wider than 50 inch Reed Space.	Under 50 inch Reed Space.	Carpets and Rugs.			Woolen.	Worsted.
In Operation . .	30,774	11,279	3,394	4,628	1,542	1,524,587	1,431,262
Idle	28,870	7,167	4,523	1,668	802	604,162	810,142
Total	59,644	18,446	7,917	6,296	2,344	2,128,749	2,241,404

Of the machinery reported in operation, 1% of the Broad Looms, 12% of the Narrow Looms, 4% of the Woolen Cards, and 5% of the Woolen Spindles were reported running 40 hours or less per week. Schedules were sent to 982 Wool Textile manufacturing concerns. In addition to the reports tabulated above, 9 concerns replied stating that the schedule did not apply to their machinery, and reports from 65 concerns had not been received at the time compilation was completed.

May 1, 1919.

Summary of Reports of 920 Manufacturers.

	Looms.			Sets of Cards.	Combs.	Spinning Spindles.	
	Wider than 50 inch Reed Space.	Under 50 inch Reed Space.	Carpets and Rugs.			Woolen.	Worsted.
In Operation . .	37,985	12,024	4,057	5,263	1,750	1,761,329	1,687,954
Idle	21,906	5,885	3,880	1,084	507	355,801	585,948
Total	59,891	17,909	7,937	6,347	2,257	2,117,630	2,273,902

In an effort to obtain complete information regarding the active and idle wool machinery in the United States as of May 1, 1919, schedules were sent to 965 Wool Textile manufacturing concerns. In addition to the reports tabulated above, 7 concerns replied stating that their equipment consisted of machinery not listed on the schedule, and reports had not been received from 38 concerns at the time compilation was completed.

Number of Machines in Operation Beginning January 2, 1919.

June 2, 1919:							
Single shift,	40,091	12,950	4,536	4,772	1,541	1,638,485	1,660,133
Double shift,	1,757	91	22	584	463	190,740	136,436
May 1, 1919:							
Single shift,	36,738	11,982	4,057	4,827	1,419	1,628,794	1,561,756
Double shift,	1,247	42	. . . .	436	331	133,035	126,198
April 1, 1919:							
Single shift,	30,302	11,219	3,333	4,296	1,325	1,431,789	1,334,662
Double shift,	472	60	61	332	217	92,798	96,600
March 1, 1919:							
Single shift,	24,969	11,364	2,613	3,510	1,040	1,147,912	1,028,190
Double shift,	344	. . . . .	49	261	170	65,484	34,588
Feb. 1, 1919:							
Single shift,	27,702	12,389	2,402	3,412	1,138	1,109,360	1,107,878
Double shift,	407	1	35	273	261	92,579	76,028
Jan. 2, 1919:							
Single shift,	35,407	12,951	2,810	3,960	1,315	1,234,032	1,370,124
Double shift,	518	2	25	316	288	109,887	64,684

June 2, 1919.

Summary of Reports of 914 Manufacturers.

	Looms.			Sets of Cards.	Combs.	Spinning Spindles.	
	Wider than 50 inch Reed Space.	Under 50 inch Reed Space.	Carpets and Rugs.			Woolen.	Worsted.
In Operation . .	41,848	13,041	4,558	5,356	2,004	1,829,225	1,796,569
Idle	17,628	4,728	3,652	975	293	327,090	481,345
Total	59,476	17,769	8,210	6,331	2,297	2,156,315	2,277,914

In an effort to obtain complete information regarding the active and idle wool machinery in the United States as of June 2, 1919, schedules were sent to 950 Wool Textile manufacturing concerns. In addition to the reports tabulated above, 6 concerns replied stating that the schedule did not apply to their machinery, and from 30 concerns reports had not been received at the time compilation was completed.

Percentage of Idle Machinery to Total Reported Beginning January 2, 1919.

June 2, 1919 . .	29.6	26.6	44.5	15.4	12.8	15.2	21.1
May 1, 1919 . .	36.6	32.9	48.9	17.1	22.5	16.8	25.8
April 1, 1919 . .	48.4	38.9	57.1	26.5	34.2	28.4	36.1
March 1, 1919 . .	58.1	42.4	61.4	39.1	47.8	41.8	52.7
Feb. 1, 1919 . . .	52.3	41.5	65.6	38.7	39.8	41.1	48.6
Jan. 2, 1919 . . .	40.3	32.6	65.8	32.2	30.7	36.5	37.5

Percentage on Government Orders to Total in Operation Beginning January 2, 1919.

June 2, 1919:							
Single shift,	.4	.7	. . .	.5	.1	1.1	.1
Double shift,	. . . . .	. . . . .	. . . . .	. . . . .	.9	.1	. . . . .
May 1, 1919:							
Single shift,	.8	.7	.2	.7	.1	.9	.6
Double shift,	. . . . .	. . . . .	. . . . .	.1	. . . . .	.1	.9
April 1, 1919:							
Single shift,	1.8	.9	. . . . .	1.6	.3	2.2	.4
Double shift,	. . . . .	. . . . .	. . . . .	.2	. . . . .	.4	. . . . .
March 1, 1919:							
Single shift,	4.2	2.4	. . . . .	4.1	.4	5.7	.4
Double shift,	.1	. . . . .	. . . . .	.6	. . . . .	.5	. . . . .
Feb. 1, 1919:							
Single shift,	9.4	2.4	.3	8.1	3.7	8.2	1.8
Double shift,	.2	. . . . .	. . . . .	.6	2.8	.8	. . . . .
Jan. 2, 1919:							
Single shift,	33.1	5.9	6.7	22.7	9.	25.3	13.5
Double shift,	.7	. . . . .	. . . . .	1.6	2.2	1.5	1.

Obituary.

A. D. JUILLIARD.

MR. AUGUSTUS D. JUILLIARD of New York, head of the great commission house of A. D. Juilliard & Company and one of the foremost textile manufacturers and merchants in the country, died on Friday, April 25, 1919, at his home in New York City. Mr. Juilliard was of French descent, a son of Mr. Jean Nicholas Juilliard, a native of Burgundy, who came to this country to engage in the textile commission business. Mr. Augustus Juilliard was born in Canton, Ohio, seventy years ago. One of his memorable experiences was the youthful friendship which he formed with William McKinley, afterward Governor of Ohio and President of the United States. Like President McKinley, Mr. Juilliard was an informed and vigorous protectionist, and the strength and wisdom of his economic views and the vigor with which they were expressed had made a profound impression upon his fellow business men and upon the country.

Mr. Juilliard in his early life became identified like his father with the textile commission trade. In the great panic of 1873 he was chosen receiver for Hoyt, Spragues & Company, then the largest commission house in New York City. Soon after he organized his own firm of A. D. Juilliard & Company, and entered in a large way into the distribution of textile fabrics, identifying himself at the same time with manufacturing.

Mr. Juilliard in civic life was one of the foremost men of New York. He was a lover of music and had served most ably as president of the board of directors of the Metropolitan Opera. He was active also in the affairs of the Metropolitan Museum of Art and the American Museum of Natural History.

Mr. Juilliard was a strong factor in finance and transportation. He was one of the directors of the National Bank of Commerce, the Chemical National Bank, the Bank of America, the Atchison, Topeka and Santa Fe Railroad, the Realty Associates and the North British and Mercantile Insurance Company. He was also a trustee of the Guaranty Trust Company, the Central Trust Company, the Title Guarantee & Trust Company, the New York Life Insurance &

Trust Company and the Mutual Life Insurance Company. His counsel on important matters always carried weight with his fellow financiers.

In all his personal relations Mr. Juilliard was a most courteous and agreeable gentleman, and his circle of friends was a remarkably wide one. Associated with him in the firm of A. D. Juilliard & Company at the time of his death were Mr. Chester A. Braman, president of the Atlantic Mills and a member of the Executive Committee of the National Association of Wool Manufacturers; Mr. Frederick A. Juilliard, a nephew; Mr. Duncan D. Sutphen, Mr. Philip Smith, Mr. Robert Westaway, and Mr. Frederick W. Johnson.

Mr. Juilliard was a member of many of the notable clubs of New York, including the Union League, the Metropolitan, the City and the Tuxedo. His ideals of business life were very high, and the value of his counsel and influence in economic and national political affairs cannot be overestimated. His death is the severest loss which the textile interests of this country have suffered for a long time.

In his will Mr. Juilliard left his entire residuary estate for the establishment of the Juilliard Musical Foundation, to assist worthy students to secure an education here or abroad, to provide musical entertainments of a high character without cost for the general public, and to aid the Metropolitan Opera Company of New York in the production of operas. It is stated that the Foundation will receive in all probability a sum "considerably in excess of \$5,000,000." Mr. Juilliard made other generous bequests of public significance.

SIMON B. FLEISHER.

ONE of the oldest and best known manufacturers of the Philadelphia district, Mr. Simon B. Fleisher, who with his brother founded the firm of S. B. & B. W. Fleisher, Inc., died on May 11, 1919, at the age of seventy-nine. Mr. Fleisher was a native of Meadville, Pa., and when a young man started in the manufacture of worsted braids in Philadelphia. Subsequently, in company with his brother, he built a worsted yarn mill and entered upon a very successful business career. The firm of S. B. & B. W. Fleisher was incorporated in 1900, with Mr. Simon B. Fleisher as president. The house is known throughout the United States for its liberal business policy and for the excellence of its products. A fine new manufacturing plant was erected for the Fleishers two

years ago in Philadelphia. Mr. Fleisher was one of the original members of the Philadelphia Bourse and of the Young Men's Hebrew Association. He had served also on the board of directors of the Jewish Hospital. Throughout his active life Mr. Fleisher gave liberally to philanthropic causes. For a long time he was a director of the Independence National Bank and afterwards a director of the Girard National Bank and also of the Northern Trust Company. Mr. Fleisher leaves a wife and five children, among them Mr. B. Wilfred Fleisher, Mr. Samuel Fleisher, and Mr. Edwin Fleisher.

EDWARD RICHARDSON.

A VETERAN manufacturer of the Philadelphia district, Mr. Edward Richardson, died on May 14 at the home of his son in Philadelphia. Mr. Richardson was born seventy-eight years ago in Halifax, England, where he mastered the spinning business. His first business connection in the United States was in 1865, when he assumed charge of Samuel Yewdall's mill, the earliest worsted spinning mill in Philadelphia. Under his direction were spun in 1869 the first worsted yarns for woven fabrics. These were made for the well-known Philadelphia manufacturer, Thomas Dolan. At that time the worsted industry was practically a monopoly of the United Kingdom.

Mr. Richardson in 1874 became the superintendent of the Tracy Worsted Mills. After 1883 he was for a while in business for himself, and then became superintendent of the Highland Worsted Mills in Camden. He left Camden to become connected with the Tillotson Manufacturing Company of Pittsfield, Mass., and later he was associated with H. C. Ball & Company of Philadelphia. He retired from business about ten years ago. The worsted industry of this country is under great obligation to Mr. Richardson's skill and enterprise. He leaves three children, one of whom, Mr. William H. Richardson, is conspicuous in the worsted yarn trade of Philadelphia.

OTTO KUHN.

DEEP sympathy is felt with the relatives and friends of Mr. Otto Kuhn of the Botany Worsted Mills of Passaic, N. J., whose death by drowning in the Hudson River has been announced as due to accident. Mr. Kuhn was forty-one years of age at the time of his death. He had secured a thorough mastery of the details of the

wool business and was regarded as one of the foremost experts in this country. His own responsibilities with the Botany Worsted Mills included the purchase of wools. In this capacity he was well known in the domestic wool market, and had made it a practice to attend wool auction sales in Antwerp, London, etc. Mr. Kuhn had become connected with the Botany Worsted Mills in the year 1903, having executive charge of the wool department. He was also for a long time a member of the board of directors of the Botany Worsted Mills. Mr. Kuhn was unmarried. He was a brother of Mr. Ferdinand Kuhn, formerly treasurer of the Botany Worsted Mills and now president.

Editorial and Industrial Miscellany.

THE TARIFF IN THIS CONGRESS.

NO NEED OF, AND NO REQUISITE INFORMATION FOR, A GENERAL REVISION OF ALL SCHEDULES.

THERE is every indication that a policy of going slowly and carefully will guide the work of tariff revision at this present special session of Congress in Washington. Protectionists dominate the House Committee on Ways and Means; they have named the veteran Joseph W. Fordney of Michigan as Chairman. The committee has entered upon active consideration of tariff matters, but has confined its attention chiefly to special phases of the tariff issue like increased duties on chemical glassware and dyestuffs, the need of which has been sharply demonstrated by the great war.

This is a just and intelligible line of procedure. In dyestuffs particularly the war has brought into sharp relief the necessity of consideration of this as a "key" industry. It vitally affects the welfare of other industries with an aggregate output of above a billion dollars a year. Wool fabrics, cotton fabrics, silk fabrics, cannot be sold without their indispensable coloring. They require this finishing touch to make them marketable and wearable.

Moreover, modern scientific warfare cannot be carried on without the help of dyestuff manufacturing in furnishing the basis for high-power explosives. There has come upon the country a keen realizing sense that a native dyestuff industry, therefore, is essential to the national defense. In the face of this impressive object lesson, partisan opposition to protectionism has in this matter broken down, and national encouragement of the dyestuff industry has been recommended in a message to Congress by a President elected on a platform of tariff for revenue only.

It seems certain that a special measure embodying the necessary encouragement in some form or other will be passed by both houses of Congress at this present session and approved by the Executive. There may be similar action in regard to chemical glassware, perhaps potash, and a few other commodities—but this is likely to be as far as complete legislation will go. Astounding social and econ-

omic changes have been wrought in Europe by the great war and its consequences. Hours of labor that ran to 60 and more a week have been shortened by government mandate, as in Germany, to 48 or 44. New and unheard-of rates of industrial wages have been established.

In France, for instance, the pay of textile workers is said to have been trebled. Moreover, long existing factory organizations have been disrupted by the war, and, perhaps most important of all, the temper of the people who have lived through such dramatic scenes has not yet slowed down to an acceptance of the sober routine of normal, workaday life. In several of the former belligerent countries great numbers of workers are being sustained through pensions from the government.

A general result everywhere in the United Kingdom and on the Continent is a heavy increase in the cost of production that in many cases has brought the prices of manufactured goods fully up to or above the level of prices of equivalent American goods, heightened though these are by an unprecedented advance in both wages and materials. This is a report that is going to Washington from one industry after another, and it makes the present time very inopportune for a detailed consideration of tariff rates and schedules. For the present, at least, American industry is in no danger from the competition of European industry, and most observers are of the opinion that this condition will continue for two or three years to come.

Therefore, while the manufacturers generally would respond to an invitation to appear before the Congressional committees and to state industrial facts as they know them, there is no desire or expectation that Congress should embark upon a revision of the important schedules of the existing tariff law. The rates of this tariff proved inadequate in normal times of peace before the war, and sooner or later they must be subjected to a thorough overhauling. But so far as these rates are *ad valorem* in their character—and a great many are such—their potency has been strengthened by the world-wide advance in the prices of commodities. Rates that were inadequate have undoubtedly now become adequate. Because a tariff once made ought not soon to be re-made, it is altogether wiser for the government and for industry that Congress should wait until conditions now abnormal and unsettled have become normal and established throughout the world, and then undertake the task of tariff revision in the light of the more precise information that will then be possible.

If the counsel of the manufacturers is invoked this is the prevalent answer that will be made to Washington. It is not necessary to undertake the framing of a new tariff bill in order to clarify and emphasize the tariff issue in the national elections of 1920. That the tariff will then be an issue is inevitable. It is the historic, ever-recurring issue between the two great political parties in America. There is every indication that a decisive majority of the American people are attached to the party of protection, and it is wholly advantageous to go before the country on the broad principle of a restoration of protectionism rather than to attempt too early, with insufficient knowledge, the framing of the complex details of another tariff law.

ANOTHER STEP FORWARD.

HOW VALUABLE RESOURCES OF ART ARE BEING PLACED AT THE DISPOSAL OF MANUFACTURERS.

MANUFACTURERS of wool fabrics and merchants engaged in the distribution of those fabrics will find much of interest in the article in other pages of this Bulletin on "Design in Industrial Arts," written by Mr. Richard F. Bach of the Metropolitan Museum of Art, New York City. Mr. Bach passes some sharp criticism upon the lack of sufficient regard for original and attractive design in the industrial arts of America, and all must recognize that in past years much more than now there has been too much basis of truth for such an indictment. In fact, such criticism might be brought against the bulk of industrial productions of most of the nations of the world, France perhaps excepted. But a new spirit has developed and is further developing, and this is notably true of the textile manufactures of America. For some years now there have been most earnest efforts for an improvement in the element of artistic design—an effort so far successful that in silk, woollen and cotton fabrics alike a larger and larger proportion of the really fine and attractive goods produced here has come from the looms of American manufacturers. A similar effort, as Mr. Bach indicates, would bring reward to American manufacturers of furniture and other articles of household equipment and adornment.

Manufacturers everywhere will be glad to express their appreciation of the activities of the Metropolitan Museum of Art in the salutary direction of affording an immediate co-operation and assistance to manufacturers not only of textiles but of furniture, garments and jewelry. The Museum has established a department espe-

cially devoted to the requirements of producers and dealers in industrial art objects, a department which will exert itself to make accessible the invaluable resources of the collections for the betterment of American design and craftsmanship. Mr. Bach, who has charge of this department, will endeavor to make it possible for manufacturers to obtain direct assistance so that they may henceforth rest assured that there are no unmined treasures in the splendid Morgan and other collections to which they do not have immediate access in terms of their own particular problems and requirements. The Metropolitan Museum has prepared an admirable illustrative catalogue of its textile collection and its uses which is available for the information of any manufacturers. There is an important department of works on textiles in the Museum library.

Those who have followed the development of the Metropolitan Museum of Art since its inception, or even during the last twenty years of its phenomenal growth, will see in this announcement one of the most important forward strides that could be taken in American industrial arts production. We all recall the emergence of the public library from its fossil age of fifty years ago when it was a "collection of books." Today the library is one of the busiest centers of any village or city, a nucleus of information of inestimable value. So it is with the museums of the country. They too have gradually emancipated themselves from the earlier state of slavery to the unmitigated instinct of the collector. Nor is this an aspersion upon the public-spirited men who first saw their way clear to establish such collections. The collector's instinct is and must be at the base of all such undertakings, museums and libraries alike, for without it the fundamental impulse that brings them into being would be lacking. But the institution once established, it no longer suffices for it to keep on its smooth course of gathering and exhibiting, believing that people are bound to come. The inertia of the human mind is too serious an obstacle to this course. Like the library, the museum has found that the collecting instinct, unimproved in accordance with the needs of the time, comes to resemble a hoarding instinct, and that to be a collection of objects ceases to be the real aim.

Thus the service ideal presently takes its place beside that of the collector's original intention and the museum objects are rendered useful by a thousand and one channels of real development in the factories and studios and salesrooms. This service ideal is given a new value in view of the gigantic struggles in France, from which so much of our inspiration in this very field has regularly come.

QUARTERLY REPORT OF THE BOSTON WOOL MARKET
FOR APRIL, MAY, JUNE, 1919, AND JUNE, 1918.

DOMESTIC WOOLS. (F. NATHANIEL PERKINS.)

	1919.			1918.
	April.	May.	June.	June.
OHIO, PENNSYLVANIA, AND WEST VIRGINIA.				
(WASHED.)	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
XX and above	*	*	*	78
X	*	*	*	*
1/2 Blood	*	*	*	*
"	*	*	*	*
"	*	*	*	*
Fine Delaine	78	78	80	90
(UNWASHED.)				
Fine Clothing	53	53	60	62
1/2 Blood, Staple	67	67	70	76
"	80	60	62	76
" "	54	54	58	75
Fine Delaine	70	70	73	74
MICHIGAN, WISCONSIN, NEW YORK, ETC.				
(UNWASHED.)				
Fine Clothing	52	52	58	61
1/2 Blood, Staple	66	66	69	74
"	58	58	61	75
" "	53	53	55	74
Fine Delaine	67	67	72	72
KENTUCKY AND INDIANA.				
(UNWASHED.)				
1/2 Blood	64	64	65	77
"	55	55	61	76
Braid	45	45	48	68
MISSOURI, IOWA, AND ILLINOIS.				
(UNWASHED.)				
1/2 Blood	52	52	57	75
"	54	54	56	74
Braid	45	45	46	66
TEXAS.				
(SCOURD BASIS.)				
12 months, fine and fine medium . .	138	150	155	175
Spring, fine and fine medium . . .	125	135	140	155
Fall, fine and fine medium	105	105	110	150
CALIFORNIA.				
(SCOURD BASIS.)				
12 months, fine	138	150	155	175
Spring, fine	130	132	135	160
Fall, fine	110	112	115	147
TERRITORY WOOL: Montana, Wyoming, Utah, Idaho, Oregon, etc.				
(SCOURD BASIS.)				
Staple, fine and fine medium . . .	165	165	175	180
Clothing, fine and fine medium . .	140	150	155	*
1/2 Blood	145	155	160	168
"	105	110	120	145
"	95	95	107	125
NEW MEXICO.				
(SCOURD BASIS.)				
No. 1	155	160	160	162
No. 2	128	130	135	150
No. 3	90	90	100	120
GEORGIA AND SOUTHERN.				
Unwashed	52	53	55	67 @ 68

* But little in the market.

BOSTON, July 1, 1919.

DOMESTIC WOOLS.

The second quarter of the year 1919 opened full of problems of a perplexing character for all dealers in wool. The Government wool auction sales occupied the attention of both manufacturers and dealers and at prices generally satisfactory to the Government.

At this period, while most dealers had great confidence in the stability of wool values and that they were likely to see higher prices, yet other merchants took a very conservative view of the situation, feeling that it was wise to go rather slow.

The new clip starting in Arizona moved with considerable freedom, and what had promised to be a consignment year proved quite the contrary, most growers preferring to take advantage of the prices prevailing and sell at home.

All reports indicate that the number of sheep have increased over last year and that a larger quantity of wool will be marketed and the wool is in excellent condition. The clip of Utah received special attention in April and moved at prices which were much more favorable to the buyers than purchases of similar wools sixty to ninety days later. Throughout the wool-growing sections, growers as a whole held their wools at very firm prices. The urgent requirements for fine, one-half blood and three-eighths wools caused the country markets to stiffen materially so that at the close of the quarter under review, high prices prevailed throughout all country points and in Wyoming and Montana reached record prices.

The last auction sale to be held by the Government occurred the latter part of June, with further sales to be renewed in the fall. At this last sale practically every lot of good wool offered was sold at full prices.

With the wool machinery of the country thoroughly employed and the heavy demand in sight for supplies of wool, the outlook for the balance of this year at least promises a firm market with increased activity.

F. NATHANIEL PERKINS.

FOREIGN WOOLS. (MAUGER & AVERY.)

Scoured Basis, 1919.

	1919.			1918.
	April.	May.	June.	June.
	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
Australian Combing:				
Choice	195	200	210	100
Good	175	180	185	90
Average	150	160	165	85
Australian Clothing:				
Choice	160	170	180	92
Good	155	160	165	87
Average	150	155	160	70
Sydney and Queensland:				
Good Clothing	150	160	165	85
Good Combing	185	190	200	90
Australian Crossbred:				
Choice	85 @ 110	90 @ 120		105
Average	80 @ 100	85 @ 110		100
Australian Lambs:				
Choice	145	145	150	90
Good	130	130	145	87
Good Defective	125	125	130	75
Cape of Good Hope:				
Choice	155	165	175	75
Average	130	135	140	60
Montevideo:				
Choice	145	160	165	85
Average	135	140	150	80
Crossbred, Choice	115	120	125	85
English Wools:				
Sussex Fleece				
Shropshire Hogs				
Yorkshire Hogs				
Irish Selected Fleece				
Carpet Wools:				
Scotch Highland, White				
East India, 1st White Joria	85	90	95	
East India, White Kandahar	70	75	80	
Donskoi, Washed, White				
Aleppo, White				
China Bail, White	65	65	68	
" " No. 1, Open	62	62	62	75
" " No. 2, Open	45	45	45	40

JULY 11, 1919.

FOREIGN WOOLS.

The demand for fine foreign wools continued strong during the months of April, May, and June, and realizing that the Government auctions would close in June, practically every lot of desirable wool was bought at the sales.

The prices of medium wools were advanced by reason of the competition of dealers, who purchased more freely.

There was a better demand for high class Buenos Aires wools, while inferior carpet wools were not in great request, and salable at lower prices.

MAUGER & AVERY.

PULLED WOOLS. (W. A. BLANCHARD.)

	1919.			1918.
	April.	May.	June.	June.
	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
Extra, and Fine A	145 @ 155	140 @ 160	150 @ 170	170 @ 175
A Super	125 @ 135	130 @ 140	140 @ 150	155 @ 160
B Super	105 @ 115	115 @ 125	120 @ 130	145 @ 150
C Super	70 @ 85	75 @ 90	90 @ 100	115 @ 130
Fine Combing	140 @ 150	145 @ 155	150 @ 160	165 @ 170
Medium Combing	120 @ 125	120 @ 130	125 @ 135	155 @ 160
Low Combing	90 @ 100	90 @ 100	100 @ 110	125 @ 140

Boston, July 14, 1919.

PULLED WOOL.

Auction sales of Government holdings continued through the three months under review and terminated with the close of the quarter. The pulled wool offerings were of inferior quality and the prices obtained are at variance with the quotations given above, which apply to wools of standard grades. Since the first of the year the Government has taken over no pulled wools and the market for these has been made by the pullers and dealers. An active demand with limited supply has resulted in advancing prices, particularly for the finer grades — A Supers and above. Coarse wools, which have had little interest for manufacturers, have steadily weakened in value and have accumulated in holders' hands.

W. A. BLANCHARD.



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[No. IV.

A DECADE OF THE NATIONAL ASSOCIATION OF
WOOL MANUFACTURERS.

By WINTHROP L. MARVIN.

It is a little more than a decade ago that the writer accepting the invitation of President William Whitman and the Executive Committee, became the Secretary and Treasurer of the National Association of Wool Manufacturers. These years from 1909 to 1919 inclusive mark an active and interesting chapter in the history of the National Association and the wool manufacture of America, and I am glad to respond to a request to record some of the more significant events of the period, opening as it did with preparations for the enactment of the Payne-Aldrich tariff, and closing with the victorious peace of the great world war.

Ever since the founding of the Association in 1864, an important field of its labors had been the protective tariff and cognate subjects. President Taft had been elected in November, 1908, with the expectation that the Dingley tariff law of 1897 should receive a friendly protectionist revision. Anticipating this issue the National Association on September 22, 1908, created a strong tariff committee of manufacturers representing both the carded wool and worsted branches of the industry and also the distinctive spinners and topmakers. This committee moved with promptness, preparing a comprehensive argument which was presented by President Whitman on December 2, 1908, before the Committee on Ways and Means in Washington. The main recommendation

was that the wool and woollen schedule under which the American wool manufacture had steadily developed be left unchanged, except for a reduction in the duty on tops to correct an inequality.

Mr. Whitman pointed out that under the Dingley Act the American wool manufacture had made reasonable progress, advancing in capital invested from \$310,179,749 in 1900 to \$370,861,691 in 1905, and in value of product from \$296,990,484 to \$380,934,003. "As one result of adequate protection," said Mr. Whitman, "the uniforms required for the increased army and navy could now be produced entirely in the United States."

COMPENSATORY DUTIES DEFENDED.

Following this first argument President Whitman also laid before the Committee on Ways and Means an explanation in defence of the system of compensatory duties and many statements from carded wool and worsted manufacturers relative to the number of pounds of raw wool required to make a pound of finished cloth. The Association through Mr. Whitman also presented a complete analysis of the separate paragraphs of the wool and woollen schedule relating to the various manufactures of wool. Other important testimony offered at this time included a comparison of profits of the textile manufacture in New England, while a separate statement as to wages and cost of operation of the wool manufacture in the United States and Germany was laid before the committee by Mr. Julius Forstmann of Passaic, New Jersey, who had had practical experience on both sides of the Atlantic, and a few years before had been a member of the German Tariff Commission. The amount and the scope of the evidence submitted by the Association while the Payne-Aldrich bill was pending in Congress may be gathered from the fact that these statements filled more than 300 printed pages as published in full in the Bulletin for March, 1909.

This work of tariff revision covered the period from November 10, 1908, when the Committee on Ways and Means began its tariff hearings, until August 5, 1909, when the conference report was agreed to by the Senate and the bill was signed by

the President. Officers and members of the Association repeatedly appeared before committees of the House and Senate in this period, and they were heartily thanked for the frankness and fullness of their statements by leading Senators and Representatives.

THE PAYNE-ALDRICH LAW WAS MISREPRESENTED BY FREE
TRADERS.

It is a matter of history that the Payne-Aldrich tariff law was sweepingly misrepresented and assailed at once by the foes of the protective system, among whom were the most active of the agents and attorneys of European manufacturing corporations. It was asserted, for example, in the anti-protectionist press and by anti-protectionist politicians that the new Schedule K greatly advanced the duties on wool cloth and clothing. This was absolutely untrue, but the falsehood was persisted in by certain elements in the press and in politics. Moreover, a serious result followed an unfortunate cleavage in the Senate between protectionists from the Middle West and other Senators over certain details of the new tariff law, causing a division in the ranks of the protectionist forces and the election of an anti-protectionist majority in the House of Representatives in the Congressional elections of November, 1910. No sooner, therefore, had one tariff contest been gone through with than another was immediately impending.

There has been much criticism in some quarters of Schedule K of the Payne-Aldrich law in that it did not provide for a sharper revision downward. However this may be, I am in a position to say as Secretary of the Association and executive officer of the Tariff Committee of 1909, that a wish for the maintenance of Schedule K unchanged undoubtedly prevailed among American wool manufacturers in general. In the autumn of 1908 President Whitman consulted by circular letter all the wool manufacturers of the country, and the dominant response was that the duties affecting the industry should be kept as they were. Therefore, the argument which the National Association presented was an honestly representative argument from the industry as a whole, though in the

case of the duty on wool a feeling developed among a portion of the carded wool manufacturers of the country that this duty in form should be ad valorem and not specific, as it had been for many years.

After having talked with many, and corresponded with more, manufacturers in this period, I am of the belief that the proved excellence of the general plan and construction of Schedule K was the chief thought in the minds of the manufacturers who asked that the schedule be left unamended—this general plan and construction rather than what happened to be the exact rates of duty of the existing tariff law. That is to say, manufacturers were influenced in their request for the maintenance of the schedule mainly by a fear that if any changes were initiated, the plan and construction of the schedule might be altered to the general injury.

MR. WILLIAM WHITMAN'S RESIGNATION PRESENTED.

At the forty-sixth annual meeting of the Association held in Washington on February 1, 1911, President Whitman offered his resignation after a long and distinguished career of active service. In accepting "with great reluctance and regret" the retirement, the Association recorded "our high regard for Mr. Whitman and our deep appreciation for the extraordinary service which he has rendered to the Association and the entire wool manufacturing industry of the United States." The formal resolutions of the Association added:

"Resolved, by the National Association of Wool Manufacturers, That accepting with great reluctance and regret the announced purpose of Mr. William Whitman to retire from the Presidency of the Association, we record our high regard for Mr. Whitman and our deep appreciation of the extraordinary service which he has rendered to the Association and the entire wool manufacturing industry of the United States.

"Resolved, That for forty-one years an active member and for seventeen years President of this Association, Mr. Whitman has borne a larger part than any other man of his time in making possible that wonderful textile development by which the American people are now independent of foreign supply for all clothing fabrics.

“Resolved, That the broad, exact information, vigor, and incisiveness with which Mr. Whitman for so many years has championed the cause of the American wool manufacture and the great principles of the protective system have placed under enduring obligation to him, not only American manufacturers and their operatives, but all patriotic citizens who rejoice in the evolution of great national industries, essential to the welfare of the country in both peace and war. Such leadership in economic achievement is in the truest sense a national service of the first importance.”

After his retirement a remarkable tribute was paid to Mr. Whitman in Boston on April 26, 1911, in the form of a dinner attended by about four hundred leaders of the textile industry of this country and of the manufacturers, bankers and merchants of New England. Hon. John D. Long, former Governor of Massachusetts, member of Congress and Secretary of the Navy, was the presiding officer. A portrait of Mr. Whitman, painted by the eminent artist, Frederic P. Vinton, was presented on behalf of the National Association. In a remarkably interesting address Mr. Whitman reviewed his career from the time he entered a commission house in Boston at the age of fourteen. His address was in effect a review of the modern textile development of New England.

MR. JOHN P. WOOD ELECTED PRESIDENT.

To succeed Mr. Whitman the Association elected Mr. John P. Wood of Philadelphia, long a member of the Executive Committee, a leading Pennsylvania manufacturer and one of the ablest students of the larger problems of the industry whom the textile business of America has produced. It was under President Wood that the National Association went on to face the critical conditions brought about by a revision downward of the protective tariff in the years from 1911 to 1913.

In the summer of 1911 and again in the summer of 1912 the La Follette-Underwood measure disrupting Schedule K against which unjust proposal the Association protested, was passed by the House and Senate, but was vetoed in both instances by President Taft, on the ground that it was based

on insufficient information and was a menace to the existence of the wool manufacture of America. The National Association of Wool Manufacturers had protested against this extreme, unjust proposal.

But when the anti-protectionist forces, through a division in the protectionist party, were able to carry the national election of November, 1912, a far graver peril arose. Though a large majority of the American people had voted in this election for the protectionist candidates of the regular or progressive Republican parties, the result was interpreted by the anti-protectionist leaders as a vindication of their cause, and they proceeded to renewed attacks upon the entire protective system. As the Bulletin of the National Association of Wool Manufacturers for June, 1913, declared, "In the Underwood tariff bill the American people for the first time since 1846 and 1857 stand face to face with the traditional Southern Democratic idea of a tariff for revenue only."

A special session of the Sixty-third Congress called by President Wilson opened in Washington on Monday, April 7, 1913. Chairman Underwood of the Committee on Ways and Means presented a substitute for Schedule K of the Payne-Aldrich law. The memorial which President Wood offered to the committee was received with manifest respect even by those who disagreed with its arguments. But on May 9, 1913, the new Underwood bill providing for a general revision downward of the Payne-Aldrich law was passed by the House of Representatives.

Promptly the National Association addressed a protest to the Committee on Finance of the Senate, declaring that its enactment "would be a menace not only to the prosperity but to the existence of the wool manufacture in the United States." It developed that the Committee on Finance of the Senate, though having an anti-protectionist majority, was willing to listen to further arguments by the manufacturers. This work continued until the woollen schedule, further revised by the Senate Committee, was submitted with the remainder of the bill to the Conference Committee on September 11, 1913. The Underwood-Simmons Tariff bill became a law on October 3, 1913. Though the new duties on wool

manufactures, even though combined with free wool were inadequate, yet it developed that the Senate had improved the bill in many details over the House proposal.

All the suggestions and arguments on behalf of the National Association were presented to the Congressional committees in printed form, with as much conscientious care as though the manufacturers were addressing the Supreme Court of the United States.

THE NATIONAL ASSOCIATION PREDICTED EFFECT OF UNDERWOOD-SIMMONS LAW.

It is a matter of record that the predictions of the National Association as to the consequences of the Underwood-Simmons law were thoroughly sustained during the seven months of the calendar year 1914 from January 1 to July 31, when the law was in normal operation. Imports of competing foreign wool cloths, dress goods, yarns, and tops enormously increased. Much American machinery became idle—and foreign manufacturers at this time were only exploring the possibilities of the American market. But then ensued the great war, first reducing imports of foreign goods and then producing a demand for American goods for export and American industry was saved, not by the wisdom of our own law-makers, but by the misfortune of other governments and other peoples.

THE WAR DISCLOSED A WOOL MANUFACTURE ADEQUATE FOR ALL NEEDS.

The great war found in existence in this country—thanks to the protective system—a wool manufacturing industry able to meet the needs of our own participation in the strife. For this emergency the Association was well prepared through the foresight of its President, Colonel John P. Wood, who as commanding officer of the First Pennsylvania Cavalry grasped the subject from the double standpoint of the officer and the business man. Under Colonel Wood's leadership the Association had taken a leading part in bringing about a relaxation of the British war embargoes on British Colonial

wools which for a time threatened to produce a wool famine in this country, and the Association had been foremost also in contending for effective national encouragement of the American dyestuff manufacture.

Even before the United States itself entered the war, at a meeting of the Woolen Goods Exchange in New York following the fifty-second annual meeting of the Association Colonel Wood, as its President, was requested, acting jointly with President Herbert E. Peabody of the American Association of Woolen and Worsted Manufacturers, to appoint a committee of which Colonel Wood should be chairman, "to arrange as fully as possible for co-operative action by the wool manufacturers of the country in furnishing needed military fabrics." This committee was selected with great care and made a report of readiness for work to the Advisory Commission of the Council of National Defense in Washington. On Friday, March 30, a week before our declaration of war, the committee had its first conference with the Commission, and broad preparations were immediately made to enlist the best energies of the entire wool manufacture of the country in the service of the government.

The work of this Joint Committee of Wool Manufacturers co-operating with the Council of National Defense has been outlined in the pages of the Bulletin, and it has been told how this first committee, on the completion of its task, was succeeded in December, 1918, by the War Service Committee of the Wool Manufacturing Industry, headed by Mr. Frederic S. Clark, who had succeeded Colonel Wood in the Presidency of the Association. Colonel Wood, who had gone with his regiment to the Mexican border in 1916, had been recalled into the national service in 1917 for the great war, and had subsequently been detailed as Chief of the Woolens Section of the Quartermasters' Department in Washington. When Colonel Wood withdrew from the chairmanship of the Joint Committee of Wool Manufacturers he was succeeded in that post by Mr. Nathaniel Stevens, President of M. T. Stevens & Sons Company.

SERVICE OF WOOL MANUFACTURERS FOR WAR WORK HIGHLY
COMMENDED.

The service of the American wool manufacture in the war was such as to receive the sincere commendation of the War and Navy Departments. No other manufacturing industry, it was declared, had been more prompt or efficient or loyal, and when the war was ended by the armistice, not only were all our vast forces in the field abundantly clothed, but there were great stores of surplus stocks of wool fabrics in the warehouses of the government.

It must not be supposed that the tariff or the war absorbed all the energies of the government in the eventful recent years. On the initiative of Colonel Wood a periodical canvass of active and idle wool manufacturing machinery was begun under the auspices of the National Association in December, 1913. This proved to be of such interest and value that it was taken over by the government in October, 1918, at the request of the Washington officials, and was entrusted first to the Bureau of Markets of the Department of Agriculture and subsequently to the Bureau of the Census.

The National Association has also gathered and prepared for official information careful analyses of the wage scales of the chief wool manufacturing centers of the country. There has been published in the quarterly Bulletin a series of articles of technical value to manufacturers by such authorities as William D. Hartshorne, Howard Priestman and others. The Bulletin has also presented a series of illustrated articles on the textile schools of the United States. The Annual Wool Review, a recognized institution in the trade annals of this country, prepared by Mr. William J. Battison, the veteran Assistant Secretary and Statistician of the Association, has been published in the Bulletins, and distributed further in pamphlet form to those interested, in this and in foreign countries. Besides, there have been frequent special reviews of the wool manufacture in this country and abroad, and the office of the National Association in Boston has continued to furnish active expert assistance in the gathering of census statistics pertaining to the industry. This office has been, throughout

these eventful years, a clearing house of information on all phases of the industry.

Within the past ten years the membership of the Association has more than doubled, and its revenues, increasing in proportion, have furnished adequate support for a steadily broadening program of activities. One of the oldest, it is also recognized as one of the strongest and most genuinely representative of the great national trade organizations of the United States. In relinquishing the post of Secretary and Treasurer for another position in another city which, as those who know me realize, makes a particular appeal to me, I wish to acknowledge the unvarying kindness and courtesy received from the officers and members of the Association. I am leaving in most competent hands the duties which I am relinquishing.

THE RESIGNATION OF SECRETARY MARVIN.

WINTHROP L. MARVIN, who has been Secretary and Treasurer of the National Association of Wool Manufacturers since 1909, has resigned to accept the office of Vice President of the American Steamship Association, New York City. Mr. Marvin relinquished the duties of this office on August 1, and took up his new work in New York on the first of September.

In accepting his resignation the Executive Committee of the Association, on motion of Mr. Nathaniel Stevens, adopted a resolution as follows:

“RESOLVED, That it is with very sincere regret that we accept the resignation of Mr. Winthrop L. Marvin as Secretary and Treasurer of this Association, in order that he may accept the post of Vice President and General Manager of the American Steamship Association.

“RESOLVED, That we hereby record our keen appreciation of his faithful, efficient, and valuable services for the past ten years, and express our heartiest good wishes for his success in his new undertaking.”

In response Mr. Marvin expressed his gratitude for these friendly expressions and said that his connection with the Association had been a pleasure to him from the beginning.

Mr. Marvin takes with him to his new work the kindest feelings of gratitude on the part of the members of the Association for whom he has done so much valuable work during the ten years of his tenure. The unusual combination of energy, skill, and good judgment which Mr. Marvin possesses has been a valuable asset to the Association in its work.

In his new undertaking Mr. Marvin has the cordial, active interest of all members of the Association. He is preëminently well fitted for the new undertaking, and his friends confidently expect him to repeat in that work the great success he has had with this Association. The greater part of Mr.

Marvin's career before he came to the Association was in connection with American shipping interests. He is the author of a standard history of the American Merchant Marine and during the administration of President Roosevelt was the secretary of the Merchant Marine Commission in Washington.

In another part of this issue of the Bulletin will be found a statement by Mr. Marvin of some of the events in the history of the Association during his administration.

A NEW SECRETARY FOR THE ASSOCIATION.

BEGINNING with August 1 the duties of Secretary and Treasurer of the National Association of Wool Manufacturers were assumed by Paul T. Cherington formerly Professor of Marketing in the Graduate School of Business Administration of Harvard University. A bulletin issued to the members of the Association under date of July 31 gives the following summary of the previous experience of the new secretary:

“Mr. Cherington already has a considerable acquaintance among wool manufacturers. He is a graduate of the University of Pennsylvania, and before entering on his work at Harvard was associated with the Manufacturers’ Club of Philadelphia as editor of the Club magazine, and was also connected with the Philadelphia Commercial Museum.

“In 1916 Mr. Cherington published a book, ‘The Wool Industry,’ which broadly discussed the problems of the woolen and worsted industries viewed primarily from the commercial side. The book attracted attention among both business men and economists, as it was the first effort to discuss an industry in detail from the marketing angle. During the war Mr. Cherington was connected with the commodity section of the Division of Planning and Statistics of the United States Shipping Board. Importations of fibers, and during the later months of the war more particularly of wool, were special objects of inquiry. During the last few months of the war, Mr. Cherington sat with the woolens section of the War Industries Board, representing the United States Shipping Board in that section. Later he was for a short time in charge of the clothing section of the price inquiry of the War Industries and War Trade Board. Mr. Cherington for several years has performed work of an advisory character for the Boston Chamber of Commerce in connection with industrial and commercial subjects.”

AN OPEN LETTER FROM THE NEW SECRETARY.

To the Members of the National Association of Wool Manufacturers:

THERE is little for me to say in assuming the duties of my new office that is not implied in the very act of undertaking the work. There are a few thoughts, however, which I am glad to put into specific language instead of leaving them wholly to implication.

First of all I desire to express my appreciation of the compliment which you as an association have paid me in asking me to help you in continuing the valuable and constructive work you have carried on for so many years. You have been one of the positive forces in American industry. It will be my purpose to do whatever I can to keep this record continuous.

In the second place, let me record my admiration for the spirit which has pervaded the work of my predecessors. I owe them much for those high standards of dignity, integrity, soundness of judgment, and energy they have so firmly set. My feeling of gratitude is especially keen toward Mr. Marvin, not only for his painstaking help in initiating me into my new duties, but also, and more particularly, for the heritage of cordial good will on the part of the members which he leaves. It will be my aim to win some measure of the regard and confidence the members of the Association so manifestly have felt toward those who have held this office.

In the third place, I want to make clear my deep realizing sense of the importance of the work to be done in the future by the Association. No elaboration of the significance of the present time in the industrial history of the country is necessary. If by virtue of my position I can to any material degree take an active part in the attack by the Association on some of the present problems of the wool industries, I shall share in a measure, I hope, some of the satisfaction which comes from worth-while achievement.

It is with a sobering sense of responsibility and with genuine enthusiasm for the task that I take up the work. I pledge to it the best I have.

PAUL T. CHERINGTON.

THE MILITARY ARGUMENT FOR DEVELOPING THE
AMERICAN WOOL INDUSTRIES.

By PAUL T. CHERINGTON.

ONE of the important results of the war having to do with the wool growing and manufacturing industries is the renewal of the emphasis upon the so-called "military argument" in favor of their preservation and development along national lines. As long as war seemed to be remote, the argument that these industries were needed as a part of the military equipment of a nation carried little weight compared with the arguments concerned with the building up of the industries on purely economic grounds. But since war has become for the United States an actual experience and not a remote fear, and since it now constitutes a factor entering into the national plans of even peace-loving peoples, the danger of being helpless with respect to wool in times of great military need is regarded almost as seriously as the prospect of being helpless and ill prepared with respect to powder or arms. A few years ago, with the last big war half a century in the past, the military argument seemed academic. Now it has become a living reason for working out a national policy of a constructive character concerning these industries.

WOOL PRODUCTION OF BELLIGERENT AND NEUTRAL COUNTRIES.

This war happened to throw together on one side all except a few of the countries producing raw wool, and it brought together also the greater part of the wool manufacturing equipment of the world. An examination of the facts of the world's wool supply as it was grouped this time, makes it clear that fortune favored the allied and associated countries in securing wool for the clothing of their armies. Such an examination, however, leaves the conviction also that combinations of nations are possible which would leave the United States seriously embarrassed in war time. The accompanying table, made by slightly rearranging figures given in a report of the

Departmental Committee on the Textile Trades of Great Britain submitted about a year ago, shows the way in which the raw wool production of the world was aligned in this war.

PRODUCTION OF WOOL 1915—MILLION POUNDS.

	Total.	Merino.	Crossbred.	Carpet.
British Empire:				
United Kingdom	122	....	122	....
Australia	570	484.5	85.5	....
New Zealand	197	6	191	....
Br. S. Africa	180	180	....	....
Falkland Ids.	4	....	4	....
Canada	11	5.5	5.5	....
Br. India	60	....	....	60
	<u>1144</u>	<u>676</u>	<u>408</u>	<u>60</u>
Other Allies:				
United States	304	174	130	....
France	79	15.8	63.2	....
Russia	380	76	....	304
Italy	21	15.75	5.25	....
Portugal	10	5	5	....
	<u>794</u>	<u>286.55</u>	<u>146.45</u>	<u>304</u>
Combined Allies.....	1938	962.55	554.45	364
Neutrals:				
Spain	52	26	26	....
South America	404	73	331	....
Other Countries	127	....	....	127
	<u>583</u>	<u>99</u>	<u>357</u>	<u>127</u>
Enemy Countries:				
Germany	25	5	20	....
Austria-Hungary	42	8	34	....
Bulgaria	35*	2*	33*	....
Turkey	175*	....	....	175
	<u>277</u>	<u>15</u>	<u>87</u>	<u>175</u>

* Estimated.

POINTS MADE CLEAR BY THESE FIGURES.

An examination of the figures given in this table makes clear four points of great importance to the United States in its relations with the world's wool supply.

First, the normal production of wool for all countries combined before the war was about 2800 million pounds per year. Of this amount, ordinarily about 1000 million pounds consisted of worsted wools of the various crossbred types. Another 1000 million was made up of clothing wools of finer types with more merino blood and classed as merino wools. The remainder, between 700 and 800 million, consisted of coarse wools ordinarily designated as low or carpet wools.

Second, by the table, it is made apparent that of merino wools the active allied countries produced 89 per cent, most of the rest coming from South America. Of crossbred wools, the allies produced 59 per cent with South America the principal supplementary source. In the case of carpet wools, apparently not over one-half of the total was contributed by allied countries. The Turkish Empire was the principal enemy country producing wools of this type, while China ranked first among the inactive belligerents and neutrals as producers of coarse wools.

Third, practically every country in the world grew some wool. The important features of the wool trade, however, centered about the comparatively few countries shown. The British Empire as a whole was collectively the most important group of sources of wool.

Fourth, roughly speaking, it may be said that the United States and the countries of continental Europe form a group of countries which not only grew wool, but which, in addition to all they produced, imported substantial quantities for manufacture. Great Britain stands in the unique position of being an important wool grower and an important wool manufacturer, and at the same time a conspicuous feature in the British colonial wool trades because of the extent to which colonial wools are brought to England for sale and re-export.

PRODUCTION, CONSUMPTION AND EXPORT OF ALLIED AND ENEMY COUNTRIES.

Figures covering the imports and exports of wool from the principal commercial countries of the world for a normal pre-war year supplement the four points thus brought out by making clear two additional facts.

The first is that the countries which during the war were classed as enemy countries produced 277, imported 540, and exported 112 million pounds of raw wool, giving a combined net consumption of 705 million pounds, assuming that stocks on hand remained approximately uniform. The allies, on the other hand, produced 1144, imported 1823 and exported 1302 million pounds, making their net consumption 1665 million pounds. The countries classed as neutral hold a strong position in the world's wool trade. Their production of 583, imports of 73, and exports of 627 million pounds, show them to be large producers with small home consumption of 31 million pounds and proportionately large exports.

NEUTRAL COUNTRIES SMALL CONSUMERS.

The second point brought out by the export and import figures is the fact that the allied countries consume practically all of their own production of the finer wools and import the remainder of their requirements. The River Plate countries and Spain among the neutrals have a large exportable surplus, the exports from the former being extremely large and important. Of the enemy countries both Austria and Germany before the war were large importers of fine wools. The production of wool in these countries, while actually large (notably the fine wools of Saxony), did not meet more than a relatively small part of the wool requirements of the central empires.

With these six points in mind, it does not require a great deal of ingenuity to construct alignments of nations in war, or even in peace conditions, which make it apparent that the former place of the United States in the world's wool trade is not satisfactory. Suppose, for example, the United States should be drawn into war with a country, whose peaceful relations with, say, the Argentine and the British Empire would be menaced if those countries should send us wool. How would our army be clothed? It becomes evident that the arguments in favor of a constructive program for wool production has become not only a desirable, but, in a larger sense than ever before, a necessary feature of the national economy. As

has already been intimated, the really open question is not whether this organization of the American wool-producing industry is to be brought about, but, who is to accomplish it?

WOOL GROWING MUST BE REVIVED AND INCREASED IN THIS COUNTRY.

Granting that the problem of the American sheep revival is mainly one of profits, what program for revival is most likely to bring about the undertaking of this work by those best fitted to do it? The following suggestions are made as a basis for discussion:

First. There seems to be an urgent necessity for the realization of the fact that someone is going to raise sheep in the United States, and do it on an increasing scale. This means that the whole emphasis in consideration of the problem might well be put on the question of how to bring to pass the return of sheep raising, rather than the question of whether it shall be brought to pass or not.

Second. In considering obstacles such as the ravages of dogs and of diseases, it should be kept clearly in mind that the end to be gained is the reconstruction of the sheep industry, not the mere passage of dog laws or the discovery of possible remedies for all sheep diseases. In other words, the attitude toward difficulties should be that of an attempt to minimize obstacles, rather than to bewail their serious consequences. The obstacles may be serious but they are not insuperable.

Third. There are favorable features in the situation, and these by all means should be made the most of. It is possible to grow the kind of sheep that will yield a profit and to bring the sheep products to market under conditions that will get the largest returns. Bad practice ought not to be allowed to interfere with the prompt placing of the industry on a sound money-making basis, both for producing and distributing the products.

Fourth. Federated action within the law, for the purpose of overcoming the handicaps of the industry, for the purpose of making the most of its favorable features ought to be un-

dertaken both locally and nationally, not for the purpose of carrying the industry along as a limping, decrepit institution, but for the purpose of putting it as promptly as possible on a profitable independent basis.

Fifth. Local and regional antagonisms ought to be abandoned, at least until the industry is strong enough to bear such luxuries. There is ample basis for making common cause against a common problem. The selfish interest of one group of growers as against another, ought to be lost sight of.

In conclusion, the statement is repeated that more than ever before it is evident that the United States during the next few years must take a position as a wool grower, relatively far more important than it ever has before. Someone will be obliged to do this important work of re-establishing this industry in this country. The sheep men of the country have the first chance to undertake the accomplishment of the task. They have the opportunity and the most direct responsibility.

A LARGE CORPORATION'S LABOR DEPARTMENT TO FOSTER CONFIDENCE BETWEEN EM- PLOYER AND EMPLOYEE.

WILLIAM M. WOOD, President of the American Woolen Company, in an address to the overseers of that Company on September 29, 1919, explained in clear language the purposes of the Labor Department established by the Company of which Department the gathering addressed marked the formal opening. Mr. Wood's address in full was as follows:

I am very glad of this opportunity to meet you in consultation and to try in a way to offset the dangerous propaganda of the agitator who seems to come periodically amongst us and disturb the peace and happiness of our industrial household. In the earlier days, these disturbers lived in our own community and worked amongst us. Their natural inclination to make trouble would soon get them an audience among the lovers of excitement; their propaganda would spread; strikes would be called, and after a long struggle and much suffering, when the strikers returned to work, they would invariably turn against their former leaders. During the period of the strike and intense suffering, the agitators flourished in plenty. They had an abundance of money; they alone lived sumptuously; they had orgies at the local hotels. They asked the workers to accept the martyrdom of starvation while they allotted to themselves compensation from the strike funds that they could not earn in any other occupation. When the eyes of the workers opened to this situation, the spell would be broken. They would return to work, and as I just said, the agitators would be discredited. They lived and flourished on the miseries of their deluded supporters. This type of disturbance later passed from local leadership to the control of outside agitators—those who looked upon the field here as a propitious one to exploit for their own selfish ends.

I know of no better illustration than the strike of 1912 started by an irresponsible, mischievous boy of 18 years of age who had been inspired to do this by the tutorings of wicked propagandists who soon moved into our community and took charge of the strike. These agitators are not confined to those who follow it for a living, but include men and women in the higher walks of life who mean well but are misguided,—men and women of education from outside communities and centers. Many of these have contributed money but it is believed to be a fact that they have been robbed by these unprincipled men. During much malicious and untrue criticism of the management, we have remained silent, but especially since these men and women of higher education believe some of these misrepresentations, and it is not unreasonable to expect that some of our own employes might likewise misunderstand, I feel it my bounden duty to do my utmost to prevent the great loss in wages and the attendant suffering that these strikes entail.

THE BASIS OF CONFIDENCE.

It is important that we should have the confidence of all the workers. Confidence is a very fragile creation and can only exist when it is based on the soundest principles of honor, the slightest departure from these principles imperiling it in its entirety. Therefore, not only the winning but the holding of confidence is of the highest importance. Kindness is one of the elements of success in winning confidence. Germany thought that clubs were trumps, but since then she has learned that not clubs but hearts were the winning cards. It therefore behooves you as overseers to see that those under you have no cause to complain of discourteous or unkind treatment.

Try by courtesy and kindness to inspire co-operation among our fellow workers, which is more important than exacting obedience. Co-operation naturally invites a willing obedience, but obedience itself does not necessarily invite co-operation. Our aim should be to encourage co-operation, for there never was a time when it was more needed than today. Increased production, which should be the outcome of co-operation, is

essential to the reduction of the cost of the necessities of life, and will make the purchasing power of our wages greater. It is well to realize that the world's working force has lost through the World War, and the epidemic of influenza, at least 10 millions of able-bodied men. This is about one-tenth of the able-bodied working force of the belligerent countries. Add to this, millions of men who have been disabled and millions more still under arms. Consider further that the reduction in working hours both in Europe and the United States means a further curtailment of 20 per cent in production, for the theory that the average workman is doing as much in 8 hours as he formerly did in ten has been pretty well exploded by recent experience. The above figures prove that the effective energy of Europe and America is some 30 per cent less than it was prior to the war. Naturally this means a lessened production of necessities. I have not included in any of the above figures the loss of production occasioned by strikes, but this figure would be appalling if it were known. In view of the above, you must all realize the tremendous importance that co-operation will play in increasing production and bringing down costs of necessities.

LACK OF CO-OPERATION INCREASES PRODUCTION COSTS.

Another illustration of how the lack of co-operation increases living costs is in the cost of building houses. Because of shorter working hours and lack of interest in their work, the artisans are adding heavily to construction costs. This makes the house cost more than it should and must necessarily be met by higher rentals.

This same principle applies to the shoe factory. If the employes do not do their best to get out production, the shoes cost more and you and I pay a higher price than otherwise need be.

The spirit of co-operation, therefore, is one that we should engender, foster, and encourage. The policy of this Company is one of a square deal for all. Its intention is to be fair and impartial, just and considerate toward all, so that, gentlemen, when you speak you will always maintain with courtesy and

dignity an attitude of meaning what you say. By so doing you will be understood to stand for these things. Tact is a splendid quality in dealing with your fellowmen. We are not all by nature endowed with this quality but it can and should be cultivated. You should feel it incumbent upon you, in the best interests of your work, to promote the happiness and welfare of the workers under your supervision. There is one thing we can always feel pretty safe about, and that is, we shall never regret being a gentleman on all occasions. We want to and do maintain an interest in the workers in the mills, and in return, we want the workers to realize that it lies with them, *and them alone*, to increase the purchasing power of their wages. It is the duty of everyone to turn out the most he can by his labor and thus help reduce costs. Our Government is working along these lines and making every effort to have the working people understand this principle. Every slacker tends to increase the cost of living. He is making the honest working man pay for his idleness. He thinks he is "putting one over" on the man who pays him his wages—instead he is only adding to the burden of life for us all. The day is coming when the working people will see this and the slacker will be looked upon with contempt.

. A DEPARTMENT OF LABOR ESTABLISHED.

In order to assist in the situation, the Executive Committee has created a department known as the Department of Labor. The personnel of this Department is

FREDERICK R. EDINGTON, *Manager*.

IGNATIUS MACNULTY AND F. S. EVANS, *Secretaries*.

The function of this department is to bring about a clearer conception of the mutual interests of the officials of the Company and the workers, with the hope that a better understanding may be brought about. You can readily realize why such a department is necessary when you stop to think that the American Woolen Company includes over 50 mills scattered over eight States with over 40,000 employees (67 per cent of whom, by the way it is interesting to note, are of Brit-

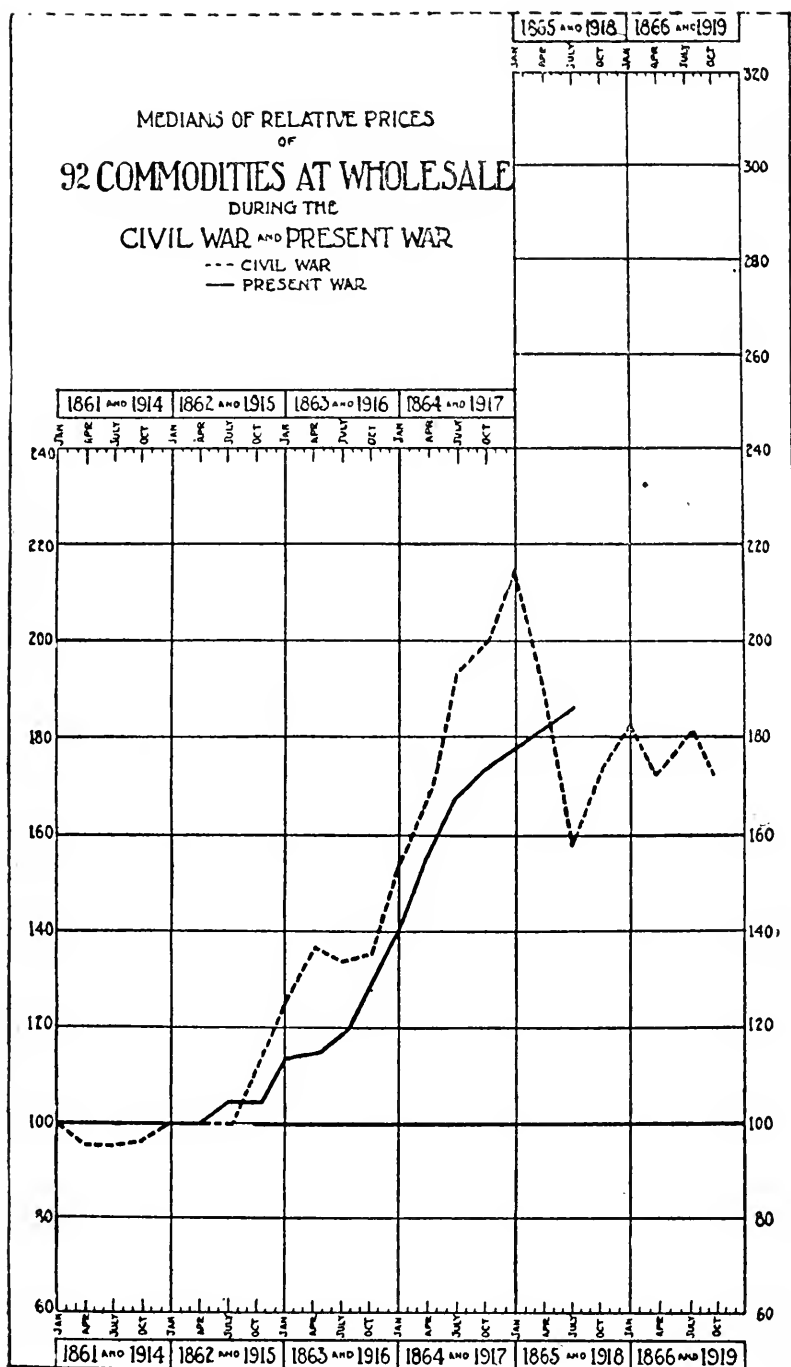
ish extraction—a higher percentage of English speaking help than any other Lawrence Mill), and that the point of view on labor matters held by any agent applies particularly to his own community, and might not harmonize with the broader policy as viewed by the Company as a whole. The Department of Labor will be a clearing house for ideas, both of the agents and of the workers and will always welcome constructive suggestions from anyone in the employ of the American Woolen Company. We realize that the Department can accomplish little unless the workers interest themselves in it, and we therefore extend a cordial invitation to everyone to make suggestions to Mr. Edington, the Manager.

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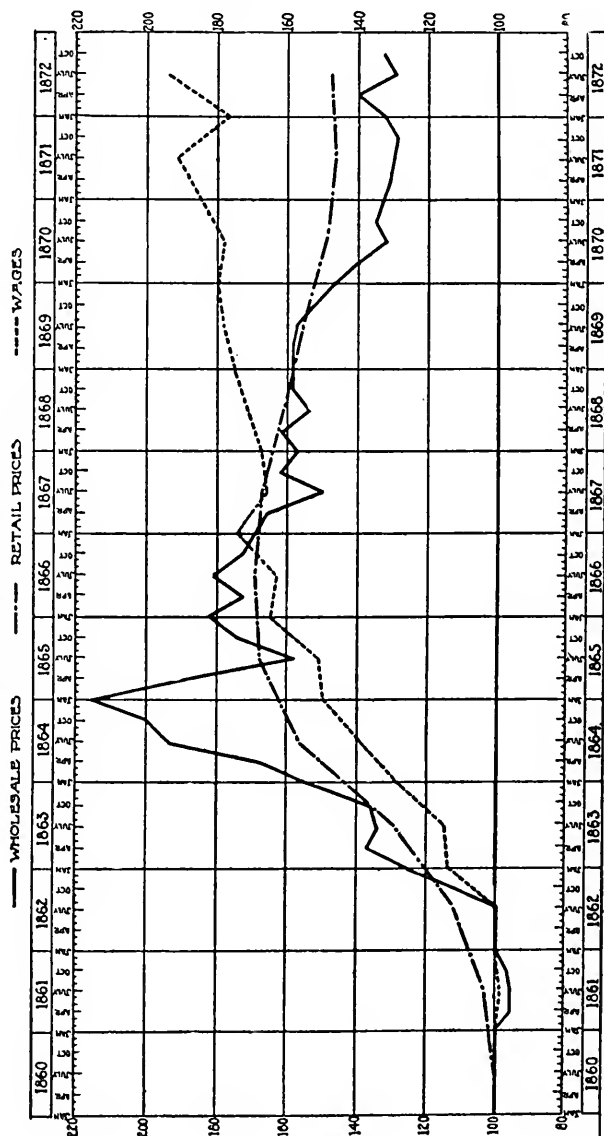
HOW PRICES ROSE AND FELL IN CIVIL WAR TIME.

THERE are two charts among those prepared by the Price Section of the Division of Planning and Statistics of the War Industries Board which ought to be in the mind of every one who has any material interest in how prices rose from their pre-war level to their present level and who is at all interested in the process by which the descent from the present price level is to be accomplished. These charts are part of the report issued by the Section giving a comparison between prices prevailing during the Civil War and those prevailing during the war just closed.

The first of these charts is one giving the medians of relative prices of ninety-two commodities at wholesale during the Civil War and the war just closed. This chart brings the figures for the Great War down to the middle of 1918, but continues the prices for the Civil War period down to the end of 1866. The most striking feature about the chart is the similarity between the general course of prices during the progress of the two wars. For the first two years of both wars the rise in prices is not very great, but during the last two years of each war the curve representing the prices of the ninety-two commodities for each of the two war periods shows an interesting parallel. Relatively, the Civil War prices were higher at the very end of 1864 than they were at the end of 1917, but the general direction of the curve in each case is similar. In fact, the curves for both war periods covering as they do approximately four years each, show a much closer parallel than would be expected. If allowance is made for the government regulation of prices of such commodities as sugar and wheat the flattening of the more recent curve in 1917 and 1918 probably would have been much less pronounced, and the general direction of the two curves would have been almost identical. These figures are all relative prices, based on the pre-war average for 5 years as 100.



RELATIVE FLUCTUATIONS
OR
COMMODITY PRICES—WHOLESALE
COMMODITY PRICES—RETAIL,
AND
WAGES
IN THE
UNITED STATES
DURING THE
CIVIL WAR AND SEVEN YEARS AFTER ITS CLOSE



The other chart in the report is in a sense an extension of this one and shows the general course of prices and wages for a series of years after the end of the Civil War. Keeping in mind the general parallel between the two curves during the period of rising prices, it is particularly worthy of note that practically seven years elapsed before wholesale prices after the Civil War reached the point of comparatively moderate increase to which they had risen by the end of 1862. It is noteworthy, also, that retail prices lagged somewhat behind the wholesale prices during the period of descent and that this lagging became particularly noticeable about five years after the end of the war. The other point for emphasis in connection with this chart is the way in which the curve for wages rose steadily for practically a year after the war period and then remained at that high level for the greater part of two years more, after which the general curve of wages tended upward still farther rather than downward to coincide with the course of prices.

It would be particularly interesting and valuable if it were possible to continue these curves with comparable figures into and through the following year, 1873, which was the year of most serious financial disturbance in the history of the country.

THE GOVERNMENT WOOL AUCTIONS.

WOOL has had a most eventful history in the United States since the signing of the armistice. In a peculiar sense the record of this commodity has been one of "demobilization." During the greater part of 1918 wool, month by month, passed more completely out of the class of materials for civilian use and into the category of war materials. The result was that when the Armistice was signed, the United States Government through the War Department not only owned the greater part of the wool in the country but it also was the only available market for most types of wool products which the American mills could then make. In fact, of all commodities entering heavily into war operations none was more completely taken over by the Government. Not only were the mills filled with military orders, but for the greater part of the year all the raw material grown or imported was taken in hand by the Government through outright ownership to be released only for the meeting of military requirements.

The military need for wool during 1918 was imperative; the military program was expanding from week to week; the military line of supply was lengthening and each month saw more American troops than we formerly had in our entire standing army added to those actually engaged in combat. Uniforms, blankets and other wool equipment had to be supplied at a rate per man which makes civilian consumption look exceedingly low. Reserve supplies had to be created, and it was necessary that submarine sinkings should be completely discounted, if a disaster was to be avoided in the winter of 1918-19, which would have made Valley Forge fade into insignificance as a symbol of military wretchedness and misery. There could be no justification of uncertainty and there could be no excuse for failure of the supply of wool or wool equipment. There had to be wool enough, and it had to be made up ready to wear, and it had to be transported to the troops in time for cold weather—accidents, sinkings, scarcity of ships,

or breakdown anywhere, notwithstanding. No postponements were possible.

ONE OF THE BIG PROBLEMS.

One of the big problems was to know how much wool equipment actually was sufficient. There were no adequate military requirement figures available for an American military organization larger than a division. The old Civil War figures were worthless and it was hopeless to try to deduce an estimate from the supply figures of our own frontier patrolling army. Moreover, the British and French figures for this war could not safely be used as more than a rough guide, since these figures contained no allowance for a supply train four thousand miles long; nor did they allow adequately for the increasing danger from submarines. There was no way to arrive at a figure for requirements except to set an initial figure for the wool supply per man in the American Expeditionary Forces which would be sure to be big enough, with the expectation that experience would show how much this figure could be reduced with safety after reserve supplies had been made certain.

The German collapse came at the time when stocks for carrying out the program in which these problems were the chief factors were at a maximum. Clothing absolutely needed for the winter of 1918 was ready or in sight for the increasing armies abroad and at home. Back of the clothes was a cloth supply, either made or contracted for, sufficient to make up the necessary reserve, and back of that was raw wool to meet contingencies. The supplies were huge, but they were no bigger than the best of possible estimates showed to be necessary on November 10, 1918.

THE HUGE SURPLUS STOCKS.

Over night the whole situation changed. Evidently the new armies then being called were not to be needed. Those in cantonments could soon be sent home. Those in the field instantly went from a campaign to a barrack basis of consumption. Demobilization became inevitable and imminent.

What had one day been a dangerously meager reserve of clothing, fabrics and wool, the next day was a huge incubus to be got rid of. Over the army hung the mandatory act of Congress, compelling the disposal of surplus stocks at public sale. Over the wool industries hung the complete stoppage of new war contracts, the probable cancellation of many which had already been entered into or arranged for, and the almost complete lack of civilian orders to take their place in time to avoid a period of idleness for mills and operatives.

The War Service Committees of the industry did valiant service in securing from the Government such concessions in the matter of contracts as considerably mitigated what otherwise would have been a calamity. The problem of getting rid of the huge surplus stocks of clothing, cloth, and particularly of wool was another matter. After much discussion between the War Industries Board and the offices of the Quartermaster General, and after the preparation, consideration and abandonment of several plans for getting the Government out of the wool business without completely disrupting the wool industry from the wool grower to the maker-up of the finished products, it was finally decided that in essence the wool on hand could not be treated by the army otherwise than as surplus material, and that, therefore, there was no choice but to put it up at public sale as required by law. In reaching this conclusion, however, the Quartermaster General's office apparently saw the necessity for recognizing the price-making conditions prevailing in the wool trade of the world, and in connection with the first announcement of the auctions issued on December 8, it was persistently rumored that in the sales the Government would establish upset prices for each lot of wool offered. The opinion prevailed that as nearly as possible these prices would have a definite relation to the British civilian issue prices as perhaps the best reflection of prevailing price-making conditions in the world's wool trade. These British civilian issue prices were, roughly speaking, approximately ten per cent less than the prices at which army wool had at the time of the armistice been issued to the mills for the execution of army contracts.

THE NET RESULTS OF THE SPRING SALES.

Between December 18, 1918, when the first sale opened in Boston, and June 26, 1919, when the closing sale of carpet wools was held in Philadelphia (the last Boston sale being held on June 23), there were in all twenty-one regular series of sales of army wools, of which thirteen series of fifty-five days' sales were held in Boston, and eight series or twenty days' sales were held in Philadelphia. In addition to these twenty-one, there were three sales held in Portland, Oregon, for the War Department and two sales of Australasian wool in Boston for the Navy Department; nor does this list include an offering of 1,800,000 pounds of medium and low wool tops offered by the War Department on May 6, of which less than one quarter were sold. At the beginning of the sales the Government is said to have had on hand or in transit not far from 500,000,000 pounds of wool. A statement issued after the last of the sales indicated that the supply still in the hands of the army on July 31 was a little over 138,000,000 pounds as follows:

Classified greasy combing wools	63,567,000
Classified greasy carding wools	48,964,000
Classified greasy scoured carding wools	16,889,000
Classified tops	1,448,000
Sundries greasy	726,000
Greasy carpet wools	3,635,136
Scoured carpet wools	3,213,637
Iceland wools	668,000

In other words, notwithstanding the extreme difficulty of the situation and the great dangers which surrounded it, the Government within seven months had transferred to the normal channels of industry more than a half-year's normal supply of wool and without serious disturbance of trade. So far as the total results are concerned, this is entitled to rank high among the cases in which the descent from abnormal war conditions to normal peace conditions was effected without severe shock. A detailed account of the various sales ought to be written and preserved as a record for future use. If war is to recur, and if industries are to be summoned on patriotic grounds to throw every resource into the winning of it, and

if all obligations are to close with the end of active hostilities, it will be worth while to have on record suggestions as to how the descent from "all war" conditions to "all peace" times may be effected intelligently.

SOME DETAILS OF THE AUCTIONS.

The first few days of selling in Boston were of absorbing interest. On the whole the organization of the sale was well worked out, and there was surprisingly little practice necessary in order to develop a satisfactory technique in auction buying and selling. It early became evident that the sales would offer an excellent opportunity for a test of bargaining ability between the Quartermaster's Department on one hand and the wool merchants and manufacturers on the other. Each side of the market displayed skill in playing for advantage. In the case of the coarser wools the advantage was with the buyers who did not want wools of this type, while the Government was anxious to get rid of them; as a result it became increasingly apparent that upset prices for these wools had to be low. In the case of the fine and medium wools the Government had the advantage, and even at fairly high prices these wools, generally speaking, were eagerly bid for at prices which were almost uniformly high after the preliminary testings of the market were over.

The first series of three days' sales on December 18, 19, and 20, showed a marked neglect of low wools, both South American and domestic, regardless of whether the wools were greasy, scoured, or pulled,—a statement which is true, in fact, of all the earlier sales. Measured by the number of withdrawals due to the failure of the bidders to reach the unrevealed upset prices, the first series was not a glowing success, although it did serve a most useful purpose in showing some of the facts about the condition of the market and the probable action of bidders, and the number of withdrawals was not larger than was to be expected.

Many of the lessons learned at the first series were put into effect at the second series which opened on January 2 and like the first series covered three days of selling. Whereas the first series had provided for the offering of 7,500,000 pounds

including 500,000 pounds of tops and a widely varied lot of foreign and domestic wools, the second series included offerings of 19,000,000 pounds, the selection of wools having been largely based on what the experience of the first series showed to be likely to sell to best advantage.

THE GOVERNMENT'S MINIMUM PRICES.

As a result of the first two series there arose a general feeling that some definite idea should be gained as to the basis on which the Government upset prices were being set. Accordingly, a committee was appointed by the Boston Wool Trade Association to examine the official catalogue of the "British Issue Prices on Wool for Civilian Purposes" in order that a representative list could be published which would serve as a basis for estimating the parity of the prices on wool offered at the Government sales. This committee, which included Samuel G. Adams, chairman, William R. Cordingly, Lewis Balch, Frank W. Hallowell, Charles W. Ryder, Robert L. Studley, and Walter P. Wright, made public its report the day before the opening of the third series of sales, and the understanding became general that the values printed were to serve as the basis for the Government's upset prices. These values were arrived at by adding 5 per cent to the British civilian issue prices, this amount being added to allow for difference in shrinkage in this country. On scoured wool the British issue prices were taken without change, and on Australian wools the expenses of importation were added in the form of a flat allowance of three cents a pound in the grease. The Government made no announcement to the effect that its prices would coincide with the list thus published, but the understanding became general that the list could serve as a fairly trustworthy guide for the purpose. This had the effect of materially steadying the bidding and much of the jockeying for advantage between the Government and the buyers was removed from the subsequent sales. Moreover, in March when a cut of $7\frac{1}{2}$ per cent was made in the British issue prices, it became generally understood that the Government's upset prices would show a corresponding decline. The difficulties attending the arrival at a satisfactory statement of

the basis for upset prices is well shown by the fact that at one time before this general understanding was arrived at, the manufacturers were insisting that the Government should drop its minimum prices to the British level, while the wool growers were at the same time clamoring vigorously for an increase in the Government's prices to the same level.

One characteristic feature of the sales throughout was that when bidding was spirited, most of the lots offered went to manufacturers; while dealers apparently were only on the lookout for bargain lots and, therefore, figured in the bidding only at times when prices were near the bottom level. This was not uniformly true, but generally speaking it was characteristic of the sales.

After a period of depression lasting through the greater part of February and March due to heavy cancellations of both army and civilian orders and the uncertain future, the sales became more active. During the three months of April, May, and June before the sales were interrupted in order to leave the market clear for the 1919 domestic clip, bidding was active; large quantities of wool were sold and some interesting record prices were paid. For example, at the army sale of June 6 two lots of greasy Sydney 70s to 80s, super clothing free wool, sold at a price of \$2.25 clean basis, while several other lots of choice wools sold at prices ranging from \$2 to \$2.11 clean. A week later at the naval sales on June 13 forty-five out of one hundred and forty-one lots offered sold at more than \$2 clean. One lot of 70s sold at \$1.01 in the grease, which, on the basis of 57 to 58 per cent shrinkage which the character of the wools seemed to justify, would make the clean cost equivalent to \$2.35 to \$2.40 $\frac{1}{2}$. At the same sale three other lots sold at prices which would work out on a clean basis of \$2.30, \$2.31, and \$2.33, respectively. In the sale for June 23 a record price for domestic wools was established when for two lots of Ohio Fine Delaine there was paid a price equivalent to \$2.03 and \$2.08, respectively, on a clean basis.

The auction as a factor in the American wool trade may or may not have come to stay. But in either case it served a most useful purpose in helping the wool industry and the country at large out of a difficult situation. P. T. C.

Editorial and Industrial Miscellany.

THE AMERICAN WOOLEN COMPANY'S PLAN FOR HOUSE OWNING BY EMPLOYEES.

WITHIN a few days of each other two of the leading corporations in the United States—the Midvale Steel and Ordnance Company and the American Woolen Company—announced the completion of plans for helping the employes to purchase and own their own homes. The American Woolen Company's plan is the one which is of more direct interest to the wool manufacture.

This plan takes the form of a separate corporation known as the Homestead Association Incorporated. In certain of the mill towns where a shortage of housing facilities exists the Association will build a number of individual houses to be located close to the mill. These houses will be offered at cost to the employes of the American Woolen Company who were on the company's pay roll on June 16, 1919, or whose names are on the life insurance list of the company.

The Association will confine its activities to the construction of individual houses only. These will be of durable, permanent construction, and will have four, five, or six rooms, and will be equipped with electric lights, modern plumbing, and other features for increasing their comfort and convenience. Each house will have approximately forty-five hundred square feet of yard, which will be attractively planted and graded. Architects in the employ of the company will supervise the design and layout of each property, and it is expected that by building a number of houses at one time substantial savings in cost of construction can be effected. These savings will be turned over to the purchaser, who will be enabled to buy the house at its actual cost of construction.

The terms of the purchase provide for a minimum deposit of five per cent of the total cost, to insure the good faith of the purchaser. The remainder of the cost will be carried as a mortgage by the Association at an interest rate of four and one-half per cent. Monthly payments of an amount approximately equal to the rental for such a house will be used to cover the interest on the mortgage,

the insurance, and the taxes, leaving a remainder each month to be applied to the reduction of the mortgage. The insurance carried on the house will be under the blanket fire and tornado insurance policy carried on properties, which will guarantee a minimum rate of insurance on the place.

If the owner of a property under this plan should die before payment of his mortgage, the returns from the Group Life Insurance Policy carried by the American Woolen Company can be applied against the mortgage on the house, if so desired. If this does not complete the payment on the house, it will at least so reduce the interest charges on the mortgage as to make payment much easier. In case the owner leaves the employ of the American Woolen Company he will be required to find a new mortgagee in place of the Homestead Association Incorporated.

In connection with these new houses is the Association's plan to safeguard the comfort and convenience of the owners against intrusion, and to this end certain restrictions on the use of the property and certain building restrictions are to be established. The Association will endeavor to place in the hands of a committee of owners the enforcement of regulations for preserving and promoting the welfare of the community.

In addition to loaning money on homes newly constructed under these terms, the Association will also take mortgages at four and one-half per cent on a quarterly plan on individual homes to be purchased by the employes of the American Woolen Company up to seventy-five per cent of their real estate value, provided the owner will pay off the mortgage in accordance with a definite schedule. Building loans will also be extended on a similar mortgage basis to the employes who wish to build single houses according to their own plans.

The plan is open to use, as has been indicated, by any person in the employ of the American Woolen Company at the time of its adoption or any employe insured by the Group Life Insurance Policy. On all applications for loans, the Association will secure the recommendation of the local mill agent, who will be consulted, and his approval secured in connection with all building operations of the Association.

AMERICAN TEXTILE TRADE DIRECTORY.

THE well known "Official American Textile Directory" for 1919, published by the Bragdon, Lord and Nagle Company, is just off the press of the Textile World Journal. It is the twenty-fifth number of this well-known directory and contains, as it has in the former years, records of all textile manufacturing establishments in the United States and Canada, together with the yarn trade index and lists of concerns which sell to or buy from textile mills. The mill section is arranged alphabetically by states as well as by towns and cities in each state. Mill names under proper post office addresses are also given alphabetically. A well known feature of this publication is the copyrighted maps of the principal manufacturing states east of the Mississippi River and also in the provinces of Quebec and Ontario, Canada. These show the location of textile mill towns and cities. The New England states, except Maine, New Hampshire, and Vermont, are given in separate maps, while the Southern, Western, and Central states, where mills are fewer, are also grouped. In this book also may be found lists of wool dealers by states, dealers in wastes, reworked wool and shoddies, wholesale rag dealers, manufacturers' selling agents, dry goods commission houses, export commission houses, and merchants of New York City. There are also lists of bleaching, dyeing, printing, and finishing establishments. The number and kind of mills in each state are given in a tabular statement.

We regret to note in the list of textile associations inaccuracies which indicate either that the greatest care has not been taken in this department, or the book was too far advanced by August 1 to permit changes to be made in the proofs. We refer to the National Association of Wool Manufacturers and the Woolen Goods Exchange, where Mr. Winthrop L. Marvin is listed as Secretary, whereas by August 1 his successor in each organization, had been elected. The same criticism can be made concerning the American Cotton Manufacturers' Association, where Mr. Arthur J. Draper is listed as President. His term expired last spring when the Association held its Atlantic City meeting, at which time his successor, Mr. James D. Hammett, was chosen. With the exception of these slips which may be excusable, the book contains a mass of material invaluable to all who are interested in any way in any of the textile industries, either on the raw material or the manufacturing side of the industry.

LIFE, LIBERTY, AND THE PURSUIT OF HAPPINESS.

ON June 26, 1919 W. W. Atterbury, Vice-President of the Pennsylvania Railroad Company delivered in Philadelphia an address which set forth in compact fashion some phases of the after-war labor problems as viewed by an alert man of affairs to whom opportunity had come for seeing conditions in industry on both sides of the Atlantic during wartime. Mr. Atterbury, it will be remembered, was Director General of Transportation in connection with the American Expeditionary Forces. The following paragraphs are taken from the central portion of his address:

"Our financial strength, unselfishly applied, will be the salvation of the world. The gain to ourselves is our realization of the rights of those who labor—and its application, our own salvation.

"For nearly two years I watched with breathless interest labor conditions as they developed on the other side—England in the throes of a social revolution; France with her industrial population ripe for anything; Italy at any moment ready to break into anarchy. I was not responsible—I was merely an observer—and I had the most detached feeling toward it all.

"I am not conscious when the change took place in myself, but I know that it came to the surface when I was asked to stay on the other side to assist in carrying on a great work. Without hesitation I said 'No! That my duty lay with the mass of men—my friends all—with whom I had been associated covering a period of over thirty years—the men, part of whom educated me, and the other part of whom I helped to educate.'

"Then I think I sensed it—that what we fought for in '76, in 1812, in '61, in '98, and what we were then fighting for, was real—that life, liberty, and the pursuit of happiness were the inherent right of all.

MY RIGHT AND THE OTHER FELLOW'S.

"I had always known that it was my right, but I do not know that I had ever had so keen a realization that it was your right and the right of every other fellow.

"I tried to put myself in the other fellow's place. What did that right mean to me, and what did it mean to him?

"It seemed to me that the following at least were essentials:

- (1) Steady employment;
- (2) At a good wage;
- (3) Time for recreation;
- (4) Opportunity to elevate myself in my employment;

- (5) A voice in determining the rules and regulations under which I should work;
- (6) A fair division of any profits after a reasonable wage had been earned and a sufficient amount paid to Capital to attract it to an expanded business.

A UNIVERSAL CHANGE OF VIEW.

"Given these, would it mean contentment to me and to my family? Would they enable me to give to my children greater advantages than I had myself enjoyed? Would these principles, if universally applied, give to our country and to the world at large what we believe to be our inherent right?

"And yet there was so much in these, if literally and liberally applied, as to seem revolutionary; and I wondered if, upon my return to the States, some might not say to me, 'Old man, you are not only in the wrong pew, but in the wrong church.'

"You can, therefore, imagine my surprise and delight to find upon my return, after discussion with many of my old associates, that the same forces which were in action on the other side were also at work at home; and that concurrently with the change in me had come a change of attitude and heart to those with whom I had been associated.

"Society can no longer regard labor as a commodity. I hate the word 'Labor' as ordinarily used, as it represents class distinction, for which there is no place in our American life. We all labor—some with our hands; some with our heads. Therefore, when I say labor I mean 'all who labor.'

"Heretofore it has been considered a commodity, subject to the law of supply and demand; but from now on we must so set our house in order that all may have steady employment—a difficult job, I grant you, but one not impossible of solution by collaboration between producers, consumers, and transporters.

"Some industries through competition may not be able to support a good wage. Artificial restrictions may limit such competition, but, in general, the only answer can be: 'Get out of the business.'

"Some business, such as our railroads and public utilities, we cannot get out of. They must be carried on. Therefore, to support a good wage there must be either a subsidy from the Government, which then becomes a direct tax on all the people, or such increases in rates as will permit the payment of a good wage and a return to Capital sufficient to attract its investment,—a tax on the user.

MANY PHYSICALLY UNFIT.

"We Americans have prided ourselves on our ruggedness and virility, and yet do you realize that during the war but 50 per cent

of the Draft were immediately available and physically fit? Curiously enough, these percentages were practically alike both for the urban and suburban population.

"In England during the war it was found that only one-third were physically fit, and this fact in itself was one of the causes of the social revolution that is taking place in that country.

"Time for recreation, and recreation itself, will not totally alleviate this condition, but it will go a long way towards improving it.

"In every man's breast, latent or active, is the desire to improve his condition. It has been our boast that America meant Opportunity. I believe this is as true today as it ever was; but industrial competition has forced us to methods which, as applied to many individuals, have made their work so monotonous and uninteresting that the seed of ambition has failed to germinate.

"On these the sunlight of opportunity, by education and change of employment, must be allowed to shine.

"I asked myself: 'Ought not I to be taken into the confidence of my employer; be advised as to his aims and his troubles; be permitted to make suggestions in the light of my experience, and conferred with in regard to conditions of work so intimately a part of my every-day life?'

"I could but answer 'Yes!'—and with the feeling that I could thereby be a better man for my employer; for thus I become an active, intelligent and willing instrument for the success of my employer, instead of an unintelligent and unwilling tool.

"The success of any business is gauged generally speaking, by its profits. There are two elements to an established business: the capital invested and the personnel employed. A stable return to capital is as essential as is steady employment to the individual. Capital has no brains and does not think. To the personnel of the business it is entrusted by its owners, who do think; and what they think gauges their point of view as investors. If stable and certain, a low return is asked. If the business is uncertain, and any return a chance, a high return is asked.

"Nor can we change this. By revolution and anarchy we can wipe capital out, but with it go all rights to property of any kind, and even civilization itself.

"Therefore, we as individuals, unless we are anarchists, are interested in the success of the business by which we are employed.

"It is difficult, however, to make the large mass of those who labor appreciate the truth of this. So something more tangible and direct is necessary to bring about the individual interest so essential to the success of the business, than mere logic and economics.

THE PRINCIPLE OF PROFIT-SHARING.

"Profit-sharing in a small business is comparatively simple, but with industrial combinations—so essential to modern business life, if we are to meet the world competition—it is difficult to allocate to one efficient man his individual share in the profits, although we know that on the efficiency, or lack of it, of the individuals taken collectively, depends the success or failure of the business.

"Granting, however, the principle, we will have taken the first long step, and with mutual confidence established I am certain that the way can be made clear."

LIVING COSTS EXPRESSED IN FIGURES.

THE National Industrial Conference Board is rendering a most useful service in securing and making available trustworthy and comparable figures showing how some of the advances in prices since the war began, affect the actual cost of living in the homes of American wage-earners. These figures give mathematical expression to the generally prevalent knowledge that living costs are rising, and they also make it possible to form some idea of the actual amount of the rise.

According to a preliminary report issued by the Board summarizing its findings, "the cost of living for American wage-earners was 71 per cent higher in July, 1919, than at the outbreak of the world war in July, 1914. This represents an advance of 6 per cent since March, 1919, and of 12 per cent since June, 1918. The increase of 71 per cent to July, 1919, makes the highest point yet reached and compares with an increase of 61.3 per cent to March, 1919; of 65.9 per cent to November, 1918, and of 52.3 per cent to June, 1918.

TOTAL INCREASE SINCE OUTBREAK OF THE WAR.

"The total increase for the five-year period since the beginning of the war in the average cost of each of the principal items entering into the family budget was:

<i>All items</i>	70.8%
Food	85%
Shelter	28%
Clothing	100%
Fuel, heat, and light	57%
Sundries	63%

"In combining these separate items to obtain the increase in the budget as a whole, account has been taken of the fact that approximately 43 per cent of the income of the average wage-earner's family is spent for food; 18 per cent for shelter; 13 per cent for clothing; 6 per cent for fuel, heat, and light, and 20 per cent for sundries. This distribution is based on studies of the expenditures of a large number of families made by the United States Bureau of Labor Statistics and other authoritative government and private agencies. The method of computing the change in the cost of living on the basis of the increase found for the separate items by the National Industrial Conference Board is shown below:

Budget Items.	Relative Importance in Family Budget.	Increase in Cost Between July, 1914, and July, 1919.	Increase as Re- lated to Total Budget.
<i>All items</i>	100.0 %		70.8 %
Food	43.1 %	85 % ^a	36.6 %
Shelter	17.7 %	28 %	5.0 %
Clothing	13.2 %	100 %	13.2 %
Fuel, heat, and light	5.6 %	57 %	3.2 %
Sundries	20.4 %	63 %	12.8 %

^a Based on an increase of 84% up to June 15, 1919, as reported by the United States Bureau of Labor Statistics.

"The allocation of expenditures for the different budget items usually varies so little among the families of wage-earners that with any reasonable distribution there would be but slight deviation from the average increase of 71 per cent since 1914." This figure is, therefore, broadly representative of conditions the country over. But it should be emphasized that special local, racial, or other circumstances may at times make necessary some revision to adapt this estimate to meet specific conditions. This is especially true of rents, since changes in this item have at times differed considerably in separate communities. With the data given, however, such necessary adjustments may readily be computed."

The report of the Board gives some details concerning the five items of the household budget indicated. Food, while showing a per cent of increase less than clothing, makes up more than half of the increase in the total budget. Fuel, light, and heat, while showing an increase of 57 per cent, indicated a rise of only 3.2 per cent as related to the total budget. Rents, similarly, have not shown as great a relative increase as some of the other items although the Board found that the "opinion was general that rents would continue to rise, since, on account of the abnormally high cost of construction and maintenance, the number of houses being built is inadequate to meet the demand for accommodations. In some

places the housing shortage had stimulated 'own your own home' campaigns and various schemes to assist people to build."

"The advance of 100 per cent in the cost of clothing is larger than that of any other of the major budget items. The average outlay for a family's clothing needs in July, 1919, was 10.5 per cent more than in March, and 3.6 per cent more than in November, 1918, when the previous high peak of clothing prices was reached. Since the summer of 1918, the average cost of clothing had advanced 13 per cent. These increases were obtained by combining the percentages of change in the cost of the separate articles according to their relative importance in the total clothing budget.

"Quotations for 29 types of most commonly used yard goods and wearing apparel were secured from 146 dealers in 43 cities. For every article the average price was higher in July, 1919, than in March. As compared with November, 1918, changes varied, but the most important were upward. Cotton and woolen yard goods, overalls, knit and muslin underwear, and the cheaper grades of work shirts, although higher in price than in March, were slightly lower than in November. Prices of yard goods increased more than did prices of made-up garments in the five-year period since 1914, but the cost of women's shoes advanced 131 per cent; women's gloves, 125 per cent; women's knit underwear, 120 per cent; women's coats, 116 per cent, and women's hosiery, 104 per cent, between July, 1914, and July, 1919. In every case these marked the highest points reached since 1914. Several articles of men's clothing also cost 100 per cent more than before the war.

"Dealers very generally expressed the opinion that clothing prices were likely to go still higher.

"A summary of changes in the cost of living as determined in the four surveys made by the National Industrial Conference Board is given in the table below:

INCREASE IN THE COST OF LIVING FOR WAGE-EARNERS IN AVERAGE AMERICAN COMMUNITIES, BETWEEN JULY, 1914, AND JULY, 1919, BY SEPARATE BUDGET ITEMS.

Budget Items.	July 1914, to June, 1918.	July, 1914, to November, 1918.	July, 1914, to March, 1919.	July, 1914, to July, 1919.
<i>All items</i>	52.3 %	65.9 %	61.3 %	70.8 %
Food	62 %	83 %	75 %	85 % ^a
Shelter	15 %	20 %	22 %	28 %
Clothing	77 %	93 %	81 %	100 %
Fuel, heat, and light.	45 %	55 %	57 %	57 %
Sundries	50 %	55 %	55 %	63 %

^a Based on an increase of 84% up to June 15, 1919, as reported by the United States Bureau of Labor Statistics.

THE BRITISH PUBLIC'S ATTITUDE TOWARD LABOR DISPUTES.

A PORTION OF THE REPORT ON CONDITIONS IN EUROPE
SUBMITTED BY THE COMMISSION SENT OVER BY THE
AMERICAN NATIONAL CIVIC FEDERATION.

THE National Civic Federation is about to publish the report of the commission it recently sent to examine after-war conditions in Europe with particular reference to labor. The report will be in the form of a volume of about 400 pages and will be divided into four parts as follows:

One.—The Labor Problem in Great Britain from the Public Viewpoint.

ANDREW PARKER NEVIN.

Two.—The Varying Forms of Labor Organization Methods and Purposes in the United States, Great Britain, and France.

JAMES W. SULLIVAN.

Three.—Social and Industrial Relations in Great Britain, France, and America from the Viewpoint of the Employer.

ALBERT FARWELL BEMIS.

Four.—Housing and Agricultural Reconstruction in Great Britain and France.

ALBERT FARWELL BEMIS.

These main headings give some idea of the general plan of the work which has been undertaken. Portions of the report have been presented in abbreviated form in the Review published by the Federation and the appearance in completed form is awaited with interest.

A. Parker Nevin, of the New York bar, who writes the first part of the report, gives particular attention to the attitude of that portion of the public which is neither organized labor nor in any strict sense a defender of capital in wage controversies. In other words, he tries to show how those who must pay for the new order of things, in the form of increased prices, are seeking to find expression for their views. The following passages from Mr. Nevin's report as printed in the Review for September 30 give an idea of the character of the report in general:

"No observer of industrial development will deny that the public is becoming a larger integral factor in the labor equation of the day. Employers and workers appreciate this significant fact. Both

groups seek to enlist public opinion in support of their respective issues, in the hope that they may be sustained in the positions taken. The interest of the public is, therefore, associated vitally with the vast and complicated problems in which the employing and employed groups are at present so deeply immersed. The public has a very direct interest in most controversies between capital and labor from the very fact that a large majority of the people as a whole is concerned with the cost of the commodities which the public consumes.

"While there is evidence that the public is taking an increased interest in such controversies, a greater increase of the best thought of the more progressive nations could be given to the formulation of plans whereby the interests of the consumer could be more adequately safeguarded in the strife that seems inevitably to arise between capital and labor. This is particularly true of the salaried and wage earning classes, whose income is more or less fixed, and who, particularly since the outbreak of the war, have been called upon to pay a constantly increasing price for the necessities of life.

BRITISH PUBLIC OPINION.

"The arena of British industry being small and concentrated, public opinion can shed its light on a given problem with almost the pencilled illumination of a searchlight. That opinion in Great Britain, in its attitude toward the labor problem, is more active, responsive and alert than in the United States, is the opinion of the writer. Against this observation, however, it may be advanced in friendly criticism that the methods, plans and procedure adopted by the public are more complicated and less effective than corresponding agencies in the United States. Public opinion placed a very important part in the verdict in the threatened disastrous coal strike in Great Britain last winter, and it had fundamentally determined that this serious national menace to British industry should be ended. We may well ponder the significance of this attitude, for it proves that there is a point to which the public is not only interested but will enforce its equities in the settlement of industrial controversies where those controversies affect the interests of the people. The public mind, of course, cannot, should not be concerned with details, but once a clear issue is fairly presented, it usually decides in accordance with broad justice and compelling reason.

"The public represents the jury in industrial struggles. Neither side to any industrial controversy has the right to seek the approval of the public without openly submitting its claims for examination and scrutiny. No strike can prevail against aroused and opposing public opinion, and no strike ever will prevail.

FOUR MEANS OF EXPRESSION.

"For purposes of loose classification it may be said that public opinion (exclusive of employers and employed) is exerted through the following broad grouping: (a) Political organization (that is, party groups); (b) the Government, through the Houses of Parliament and the Ministry; (c) miscellaneous civic, religious, educa-

tional and reform societies; (d) the press. When these and other groupings address themselves to an analysis of and participation in British trade and labor problems, it may be assumed that any considerable unity of action might be called the expressed opinion of the citizenship of Great Britain. If this be true, we may indicate certain generalizations arising through these agencies in their especial application to the problem of British industrial relations.

"The Labor Party, of which Mr. Arthur Henderson is leader, seeks political and legislative action as the most effective means of translating labor demands into terms of enforceable reform. It holds that the aspirations of labor cannot be put into effect without political action. This party, however, does not represent all the wage workers of Great Britain, reflecting merely a part, the numerical strength of which is debatable. British workmen as a mass are not convinced that the political program for industrial reform advocated by Mr. Henderson and his associates is the wisest one for them. They believe that their aims and desires can be fully accomplished by action other than that which is strictly political. The present Coalition Government shows a tendency to permit employers and employed to work out their own industrial salvation with or without legislation. The radical group of socialists, represented by Mr. Snowden, Mr. McDonald, Mr. Webb and others in their respective schools of political phantasy, are regarded suspiciously by the average British worker, and unitedly opposed by British employers.

THE DEMANDS OF BRITISH RADICALS.

"The basic principle of radical thought in Great Britain is that present industrial conditions demand changes in scheme, purpose and method. They believe that the capitalistic system is so faulty that new arrangements are necessary wherein the worker is protected socially and economically against the oppression claimed to be inherent in the existing system. They contend that industrial society owes its allegiance primarily and organically to the source of common welfare, which is the State. If men fight as soldiers for their country, they argue, why should they not also work for their country from similar motives of service and devotion? Their plan, in principle, is for a nationalized sense of service.

"This may be generally accepted and designated as socialism, but it is not certain that some of the radical wing in British industry would admit that it is socialism at all.

"Industry must exist within certain definite classifications: either it must be the result of private enterprise with private capital employed and with labor an integral factor; or, it must be communized, which means that the two main factors are the State and the workmen—the State furnishing capital, paying wages and appropriating profits if any are made over the cost of service; or, industry must be proletarianized, which would abolish capitalism, eliminate employers, private or State, and combine all labor, manual and brain, in each industry into one large collective unit. If an industry should become thus proletarian in its structure, it would necessarily become either guildism or syndicalism. If industry is to merge

into the guild system, there will be no imaginative enterprise, capitalistic initiative nor the taking of commercial risks. Instead of the guild being subject to the community, the community will be subject to the dictates of the guild. If industry should become a product of syndicalism, capitalism as well as the State will disappear, and there will be one group dominating the entire community, nation and government. It does not seem possible to escape the classification of industry into one of these groups.

THE PROGRAM OF BRITISH SOCIALISTS.

"Socialists, on the other hand, repudiating communism and proletarianism, seek to substitute State control of means and agencies of production. Their claim is far more plausible to the plastic mind than the extreme forms of organization to which allusion has been made.

"The obvious weakness in the program of the radical group is the absence of coherent and practical plans for execution. English conservatism, in the writer's opinion, wholly precludes employers or employees adopting socialism as we ordinarily use that term. Our Commission met employers who were wholly hostile to socialism, but expressed a willingness to adopt advanced ideas towards socializing their plants and businesses. They recognize clearly and sympathetically the pressing need of serious reforms in British industry. Such as these were entirely at variance with the radical element, but they were willing to go very far towards evolving means to stabilize and mutualize relations between themselves and those in their employ. The attitude of these men was impressive, and one could see in their progressive willingness to enrich industry with forward-looking plans of action the real hope of future industrial strength and harmony. Such methods of socializing industry upon sound, enlightened and humane principles can and will proceed without reliance on or connection with the theories of a state control of industry or sinister hints of sudden revolution.

THE NEED FOR INCREASED PRODUCTION.

"Every commission and every individual which has made a study of industrial conditions in Great Britain since the war has been impressed with the fact that greater production is the crying need of the country. It was interesting to find men so opposed in their general views with regard to the problems of capital and labor as Lord Leverhulme, head of the vast Sunlight Soap industry, and Mr. Arthur Henderson, General Secretary of the British Labor Party, united with regard to this matter. Lord Leverhulme stated that it was immaterial to him what the weekly schedule of hours was if there were adequate production. Mr. Henderson, from an entirely different viewpoint, stated that increased production for the needs of the community was paramount to any question arising between employers and employees, and his statement contained a veiled threat that unless production were maintained in response to the normal needs of the nation, the whole system of British employment

would be attacked by labor and a comprehensive plan of nationalized control would follow.

THE ABANDONMENT OF SABOTAGE.

"The old idea of limitation of production by British workmen is being abandoned, and there is being substituted a better and quickened understanding of the necessity of enlarged productivity. Trade unions clearly recognize and openly advocate the economic effect of increased production, and there is no evidence of insistence upon the reinstatement of pre-war restrictions of output.

"Most impressive during the travels of our Commission through Great Britain was the attitude of broad minded representatives of trade unionism in seeking to establish cordial plans of co-operative action between employers and employees.

"There is a growing demand that the status of labor be stated in the terms of a new morale of industry. Evidence of this insistence is shown in recent reports of committees representing various organizations, all of which agree substantially in the conclusions reached as to the worker himself. For instance, the report of a committee appointed by the Archbishops of the Church of England to make a broad survey of the new spirit in industry thus characterizes the situation to which I refer:

" . . . We think that the common description of workers as 'hands' summarizes aptly an aspect of their economic position which is not the less degrading because it has hitherto met with too general acquiescence. The suggestion is that the worker is an accessory to industry, rather than a partner in it; that his physical strength and manual dexterity are required to perform its operations, but that he has neither a mind which requires to be consulted as to its policy nor a personality which demands consideration; that he is a hired servant whose duty ends with implicit obedience, not a citizen of industry whose virtue is in initiative and intelligence.

"Labor as a whole is more trustful of British employers than the Government or the politicians. In considering Great Britain's industrial situation the American reader should remember that the Government officially recognizes the legality of trade unionism, and there is practically no issue between employer and employed with respect to the enforcement of the principle of the closed shop. The chief concern of the public toward trade unionism in relation to industry is not the form of organization nor the number engaged in the ranks of the union, it is the solemn question whether trade union officials and their followers recognize that as their power increases so does their responsibility.

"Whether as a practical method of joint operation workers should be permitted to have a voice in the direction of all the affairs in a given industry is as much of a question and as much disputed in Great Britain as in America.

"The least thing I would suggest as the workers' right,' says Mr. Clynes, 'is a share in the direction of industry in all matters immediately relating to the workers' welfare. There is nothing the Brit-

isher will claim more than the right to take part in what he feels is his proper sphere of service.'

"He further argues that in all matters that affect directly the welfare and the working conditions of the masses of the workers they have a right to take some share in the general management of the business. I do not believe, however, that there is a dominating desire on the part of the workers or employers in Great Britain for that form of industrial democracy which would place the workers in the sphere of management.

"The deep, underlying defect in the entire scheme of modern industry is that it is functioning upon a wholly materialistic basis. The spiritual is not there; and until it is, until the forces of a higher spiritual impulse begin to permeate the body industrial, one fails to see whence the urge for higher development will come."

THE BRITISH STANDARD CLOTHING PLAN.

At the meeting of the British Wool Council in London on July 17, 1919, it was voted to recommend to the Board of Trade the adoption of the sub-committee of the Council appointed to consider the advantages of reintroducing and extending the standard clothing scheme. The vote of the Council was unanimous in this recommendation except as to the compulsory clause in the report upon which there was a difference of opinion.

The text of the recommendations of the committee was as follows:

"The Committee has restricted its recommendations to the provision of suits and overcoats for male wear, as an example of the methods which it considers might be applied to other forms of woolen clothing.

"(1) That any scheme adopted must be operated under compulsory powers, and that the Government must give financial support to the scheme by purchasing all necessary materials.

"(2) That the scheme should be inaugurated for a minimum period of one year, and shall then be reconsidered, the quantity of cloth to be produced being approximately 25,000,000 yards for male wear.

"(3) That suitable bunches of patterns be agreed upon, and that the patterns consist of all woolen and worsted cloths suitable for men, youths, and boys, and that shoddy and cotton are only included on the responsibility of the manufacturer, who will be required to produce cloth up to standard. That all suitable manufactured surplus materials now held by the Government be utilized in this scheme.

"(4) That it is the opinion of the Committee that the Government must hold a large reserve of khaki material, which, to meet Government liabilities, cannot possibly be made up for several years

ahead. We consider it necessary that proper details should be furnished with regard to these reserves, and that having regard to the shortage of supplies for civilian purposes, and the present serious position with regard to prices, large reserves for Government purposes are unwarranted. From these reserves which have not been declared surplus there should be available at once quantities of cloths which will relieve the present difficult position, so far as civilian woolen cloths are concerned.

"(5) That the Government undertakes to issue the necessary wool or tops at controlled prices. The tops and yarns to be produced on conversion costs.

"(6) That the contracts for the manufacture of the cloth be distributed on conversion cost by an Allocation of Contracts Committee.

"(7) That the cloth be purchased from the Government by the clothiers through a special committee, and made up on conversion cost. The clothing and all other standard goods to bear a special label.

"(8) That definite and prompt delivery dates be determined, and that manufacturers be required to adhere strictly to the appointed dates.

"(9) That the Government make arrangements for the inspection of all supplies and that suitable provision be made for arbitration in the case of disputes.

"(10) That the Committee is convinced that the question of distribution is a very difficult one and that the cost of distribution varies very considerably in different sections of the trade and in different parts of the country. Those consumers for whom provision is being made should obtain the greatest possible advantage from the scheme. The Committee considers that, on the whole, regular channels of trade should be the medium through which standard goods should be distributed, but is not prepared to give a final opinion until representatives of the retail trades have been consulted.

"(11) That a comprehensive scheme be provided on similar lines for women's wear, flannel, blankets, and hosiery."

AN ATTEMPT TO ESTABLISH CLOSER INDUSTRIAL RELATIONS.

THE establishment by the American Woolen Company of a Labor Department, outlined on other pages of this Bulletin by President William M. Wood, is an attempt to provide a channel through which the operatives of the company's fifty odd mills scattered throughout the country may establish sympathetic contact with the operating officials. This Labor Department with trained men at its head, some of whom have themselves been in the mills as workers and

others in organized labor, is an interesting variation on current methods of meeting labor troubles, and its outcome will be keenly watched by all who are interested in the greatest problem facing the manufacturers of today.

In principle, the plan is simple, and its purpose is the highly sensible one of making easy the sort of contact between employer and employe which modern conditions have made difficult. The development of great corporations has lessened the close contact and personal touch of the employer with the employe, which were common when industrial organizations were characteristically small. It has long been recognized that the gulf separating the working from the managing forces was a weakness in the industrial situation which it is desirable to correct. The attempts to bridge this gulf have been among the most conspicuous features of recent developments in the handling of labor. As a matter of fact, both from the side of labor and of capital this difficulty has been one of the chief points of attack in connection with the increasingly active form which labor problems have taken during the past few years. The managers of many large enterprises in a truly laudable way have endeavored to come to a better understanding with their labor forces. Labor, on the other hand, has proposed many plans for amalgamating the managing and operating activities. These have ranged from the revolutionary projects of the I. W. W., in which the workers are to dispossess the present owners and are themselves to become the owners and managers of the establishments, all the way to the plans for industrial democracy based on some of our familiar forms of political mechanism as advocated by John Leitch and already in operation in a number of plants. The American Woolen Company's experiment is an endeavor in a somewhat new direction, and contains ideas which are sound in principle and which promise to be effective in practice.

Statistics for Third Quarter, 1919.

ACTIVE AND IDLE MACHINERY, JULY, AUGUST, AND SEPTEMBER, 1919.

AS REPORTED BY THE BUREAU OF THE CENSUS,
UNITED STATES DEPARTMENT OF COMMERCE.

IN December, 1913, this Association undertook to gather from the wool manufacturers of the country monthly reports of the number of their principal machines, together with a statement showing how many of them were actively employed and how many were idle. The requests of this Association for this information were very readily complied with by the manufacturers applied to and later when the war broke out, further inquiries were added so that information might be obtained of the amount of machinery employed on war orders for government purposes. These inquiries were continued until November last when, at the request of the Bureau of Markets of the Department of Agriculture, the work was turned over to that Bureau on the supposition, although the returns had been very full and quite satisfactory, that those manufacturers who had not complied with the request of the Association might more readily give the information to a government bureau. The inquiry was continued by the Bureau of Markets until recently, but because of a lack of appropriations the Bureau has turned it over to the Bureau of Census, as appears from the following notice:

"The Monthly Active and Idle Wool Machinery Report issued in the past by this Bureau will in the future be compiled and released by the Bureau of Census, Department of Commerce, Washington, D. C. All communications regarding wool machinery in operation and idle will therefore be addressed to that Department.

"The Wool Market Report containing information relative to trade conditions and prices on the various grades of wool in the Boston and Philadelphia market will be discontinued. This action is necessary owing to insufficient funds being provided in the Agricultural Appropriation Bill for the fiscal

year beginning July 1, 1919, to continue all the market report service and other wool work heretofore conducted by this Bureau.

"The coopération and interest manifested by the trade in connection with these reports has been gratifying, and it is regretted that it will be impossible to continue this phase of the work with the limited funds at our disposal."

The first reports under this arrangement, those for the months of July, August, and September, 1919, are reproduced herewith:

July 1, 1919.

Summary of Reports of 928 Manufacturers.

	Looms.			Sets of Cards.	Combs.	Spinning Spindles.	
	Wider than 50 inch Reed Space.	Under 50 inch Reed Space.	Carpets and Rugs.			Woolen.	Worsted.
In Operation . .	46,300	13,449	5,071	5,706	2,240	1,976,781	1,978,488
Idle	13,064	4,735	3,194	615	184	193,164	308,258
Total	59,364	18,184	8,265	6,321	2,424	2,169,945	2,286,746

August 1, 1919.

Summary of Reports of 921 Manufacturers.

	Looms.			Sets of Cards.	Combs.	Spinning Spindles.	
	Wider than 50 inch Reed Space.	Under 50 inch Reed Space.	Carpets and Rugs.			Woolen.	Worsted.
In Operation . .	46,314	13,957	4,982	5,727	2,213	1,955,683	2,042,285
Idle	13,118	4,632	2,739	597	153	191,440	250,594
Total	59,432	18,589	7,721	6,324	2,366	2,147,123	2,292,879

Percentage of Idle Machinery to Total Reported.

Sept. 2, 1919 . .	19.9	22.8	37.2	8.1	5.5	7.9	12.8
August 1, 1919 . .	22.1	24.9	35.5	9.4	6.5	8.9	10.9
July 1, 1919 . . .	22.0	26.0	38.6	9.7	7.6	8.9	13.5
June 2, 1919 . . .	29.6	26.6	44.5	15.4	12.8	15.2	21.1
May 1, 1919 . . .	36.6	32.9	48.9	17.1	22.5	16.8	25.8
April 1, 1919 . . .	48.4	38.9	57.1	26.5	34.2	28.4	36.1
March 1, 1919 . . .	58.1	42.4	61.4	39.1	47.8	41.8	52.7
Feb. 1, 1919 . . .	52.3	41.5	65.6	38.7	39.8	41.1	48.6
Jan. 2, 1919 . . .	40.3	32.6	65.8	32.2	30.7	36.5	37.5

358 NATIONAL ASSOCIATION OF WOOL MANUFACTURERS.

Number of Machines in Operation Beginning January 2, 1919.

	Looms.			Sets of Cards.	Combs.	Spinning Spindles.	
	Wider than 50 inch Reed Space.	Under 50 inch Reed Space.	Carpets and Rugs.			Woolen.	Worsted.
Sept. 2, 1919:							
Single shift,	46,178	104,107	4,901	5,104	1,403	2,793,906	1,814,667
Double shift,	2,557	359	10	730	745	212,020	198,306
August 1, 1919:							
Single shift,	44,078	13,020	4,967	5,010	1,505	1,744,236	1,892,637
Double shift,	2,236	129	15	717	708	211,447	149,648
July 1, 1919:							
Single shift,	44,194	13,334	5,065	4,978	1,529	1,735,497	1,835,594
Double shift,	2,106	115	6	728	711	241,283	145,094
June 2, 1919:							
Single shift,	40,091	12,950	4,536	4,772	1,541	1,638,485	1,660,133
Double shift,	1,757	91	22	584	463	190,740	186,436
May 1, 1919:							
Single shift,	36,738	11,982	4,057	4,827	1,419	1,628,794	1,561,756
Double shift,	1,247	42	. . . .	436	331	133,035	126,198
April 1, 1919:							
Single shift,	30,302	11,219	3,333	4,296	1,325	1,431,789	1,334,662
Double shift,	472	60	61	332	217	92,798	96,600
March 1, 1919:							
Single shift,	24,969	11,364	2,613	3,510	1,040	1,147,912	1,028,190
Double shift,	344	. . . . .	49	261	170	65,484	34,588
Feb. 1, 1919:							
Single shift,	27,702	12,389	2,402	3,412	1,138	1,109,360	1,107,878
Double shift,	407	1	35	273	261	92,579	76,028
Jan. 2, 1919:							
Single shift,	35,407	12,951	2,810	3,960	1,315	1,234,032	1,370,124
Double shift,	518	2	25	316	288	109,887	64,684

WOOL STOCKS AND CONSUMPTION.

BELOW is the report of the United States Department of Agriculture showing the quantity of wool on hand in the United States as of June 30, 1919. This statement is issued quarterly by the Department, and corresponding statements for previous quarters were published in earlier numbers of the Bulletin. These figures taken in connection with the Government monthly reports of wool consumed and of the Active and Idle Machinery Reports give a very clear idea of the condition of the industry from time to time.

WOOL STOCKS, JUNE 30, 1919, AS REPORTED BY DEALERS, MANUFACTURERS, AND THE UNITED STATES GOVERNMENT.

As Reported by 333 Dealers and 621 Manufacturers.	Held by		Total.	Estimated Equivalent Grease Wool.	Held by Government.	
	Dealers.	Manu- facturers.				Estimated Equivalent Grease Wool.
Grease Wool:	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
Domestic	131,852,170	60,991,891	192,844,061		12,757,000	
Foreign	66,445,747	86,686,150	153,131,897		97,102,000	
Total	198,297,917	147,678,041	345,975,958	345,975,958	109,859,000	109,859,000
Scoured Wool:						
Domestic	7,703,739	8,228,875	15,932,614		1,860,000	
Foreign	14,451,206	7,888,103	22,339,309		20,495,000	
Total	22,154,945	16,116,978	38,271,923	76,543,846	22,355,000	22,355,000
Pulled Wool:						
Domestic	6,122,015	6,642,986	12,765,001		1,280,000	
Foreign	3,986,453	5,097,489	9,083,942		9,311,000	
Total	10,108,468	11,740,475	21,848,943	31,212,776	10,591,000	15,130,000
Total grease, scoured, and pulled						
Tops	1,801,441	11,388,003	13,189,444	26,378,888	1,448,000	2,996,000
Noils	2,576,929	9,819,987	12,396,916	25,793,832	10,000	20,000
Grease equivalent of all wool reported above,				505,905,300		150,360,000
Estimated grease equiv- alent of all wool re- ported held by deal- ers, manufacturers, and the U. S. Govern- ment June 30, 1919,						656,265,300

Schedules were sent to 1,138 textile manufacturers and wool dealers, of which 170 were returned showing no stocks on hand, and 14 reports were not received in season to be included.

WOOL CONSUMED BY MONTHS.

Our record of wool consumed as reported by the United States Department of Agriculture is given as usual. The last Bulletin contained reports for the months of March, April, and May of the current year. The reports for the months of June, July, and August follow:

JUNE, 1919.

Schedules sent to 549 establishments.

- 9 reported too late for tabulation;
- 3 reported as using only tops, yarns, and wastes;
- 47 reported as using no wool;

		In Grease.	
490 reported wool used as follows:			
In grease.....	40,332,664 pounds	=	40,332,664 pounds.
Scoured.....	6,064,243 "	=	12,128,486 "
Pulled	2,452,985 "	=	2,452,985 "
Total	48,849,892 "	=	54,914,135 "

JULY, 1919.

Schedules sent to 575 establishments.

- 13 reported too late for tabulation;
- 3 reported as using only tops, yarns, and wastes;
- 46 reported as using no wool;

		In Grease.	
513 reported wool used as follows:			
In grease.....	45,213,307 pounds	=	45,213,307 pounds.
Scoured.....	7,485,323 "	=	14,970,646 "
Pulled	2,274,463 "	=	2,274,463 "
Total	54,973,093 "	=	62,458,416 "

AUGUST, 1919.

Schedules sent to 549 establishments.

- 4 having 45 sets of woolen cards and 63 combs reported too late for tabulation;
- 5 reported using only noils, tops, and wastes;
- 34 reported no wool used;

		In Grease.	
506 reported wool used as follows:			
In grease.....	40,427,075 pounds	=	40,427,075 pounds.
Scoured.....	6,346,756 "	=	12,693,512 "
Pulled	2,164,645 "	=	2,164,645 "
Total	48,938,476 "	=	55,285,232 "

During the three months the quantity of wool reported as consumed in the mills reporting equalled 140,586,807 pounds in condition purchased, estimated to equal 172,957,883 pounds in original greasy condition.

The imports of wool during the same three months are reported as being 109,095,356 pounds of Class I. unwashed, 1,122,805 washed, and 5,401,765 pounds scoured; 1,162,025 pounds unwashed and washed, and 76 pounds scoured of Class II.; and 23,739,904 pounds unwashed and washed, and 56,876 pounds scoured of Class III., making a total of 140,587,807 pounds of all classes in condition purchased.

COMPARATIVE STATEMENT OF IMPORTS AND EXPORTS OF
WOOL AND MANUFACTURES OF WOOL FOR THE TWELVE
MONTHS ENDING JUNE 30, 1918 AND 1919.

GROSS IMPORTS.

ARTICLES AND COUNTRIES.	Quantities for Twelve Months ending June 30.		Values for Twelve Months ending June 30.	
	1918.	1919.	1918.	1919.
WOOL, HAIR OF THE CAMEL, GOAT, ALPACA, AND OTHER LIKE ANIMALS, AND MANUFACTURES OF:				
UNMANUFACTURED—				
Class 1—Clothing (free)	<i>Pounds.</i>	<i>Pounds.</i>		
Imported from—				
United Kingdom	161,498	1,516,252	\$118,765	\$645,701
Canada	1,577,018	7,442,599	852,263	5,098,572
Argentina	161,981,865	121,579,497	93,664,516	67,222,577
Chile	12,069,231	6,888,162	5,807,669	3,681,037
Peru	4,643,618	2,607,330	2,232,274	1,528,415
Uruguay	17,785,170	34,386,870	10,828,481	19,103,925
China	13,226,755	9,419,649	4,160,050	3,588,284
Australia	29,956,449	77,600,344	19,778,829	47,613,593
New Zealand	4,117,146	14,904,938	2,043,960	8,193,676
British South Africa	55,757,397	47,878,642	24,658,829	24,247,567
Other countries	2,592,763	3,720,285	880,707	1,608,690
Total	303,868,940	327,944,568	\$165,026,343	\$182,532,037
Class 2—Combing (free)				
Imported from—				
United Kingdom		53,122		\$46,946
Canada	8,419,647	412,414	\$5,664,629	299,128
Argentina	3,838,542	1,181,355	2,147,035	763,866
Other countries	1,695,768	736,660	772,314	333,062
Total	13,953,957	2,383,551	\$8,583,978	\$1,443,002
Hair of the Angora goat, etc. (dutiable)				
Imported from—				
United Kingdom	173,265	95,754	\$77,962	\$75,113
Peru	1,330,635	972,168	712,865	971,095
China	41,825	349,237	13,270	169,516
British South Africa	758,503	6,278,359	259,013	2,724,025
Other countries	8,147	212,574	5,115	107,572
Total	2,312,375	7,908,092	\$1,068,225	\$4,047,321
Class 3—Carpet (free)				
Imported from—				
Greece		36,947		\$11,823
Italy				
Portugal	88,529	226,045	\$36,463	82,707
Russia in Europe	96,790		39,130	
Spain	620,299	201,790	257,028	54,166
United Kingdom	138,367	5,985,785	49,312	1,956,085
Argentina	15,258,176	16,690,943	8,409,399	8,396,742
Chile	5,231,980	16,125,000	2,923,203	7,673,358
China	24,432,434	28,747,295	7,205,509	10,602,088
British India	41,309	47,040	11,408	4,704
Russia in Asia	2,602,589	115,008	541,653	20,661
British South Africa	4,521,876	3,230,505	1,804,995	1,584,820
Other countries	5,962,313	12,772,095	2,789,265	6,100,548
Total	58,994,662	84,178,453	\$23,867,365	\$36,387,702
Total unmanufactured	379,129,934	422,414,664	\$198,545,911	\$224,410,062

COMPARATIVE STATEMENT OF IMPORTS AND EXPORTS OF
WOOL, Etc.GROSS IMPORTS. — *Continued.*

ARTICLES AND COUNTRIES.	Quantities for Twelve Months ending June 30.		Values for Twelve Months ending June 30.	
	1918.	1919.	1918.	1919.
MANUFACTURES OF—				
Carpets and carpeting, etc. (dutyable)	<i>Sq. Yards.</i>	<i>Sq. Yards.</i>		
Carpets and rugs woven whole (dutyable) . .	473,604	165,996	\$2,247,128	\$962,297
All other (dutyable) . .	166,687	78,286	614,304	303,468
Total	640,291	244,282	\$2,861,432	\$1,265,765
CLOTHS (dutyable)				
Imported from—	<i>Pounds.</i>	<i>Pounds.</i>		
Belgium				
United Kingdom . .	2,415,236	1,554,339	\$4,024,595	\$3,475,056
Other countries . . .	215,646	7,654	594,903	23,112
Total	{ lbs. 2,630,882 sq. yds. 3,864,145 }	{ 1,561,993 2,302,846 }	\$4,619,498	\$3,498,168
DRESS GOODS, WOMEN'S AND CHILDREN'S (dutyable)				
Imported from—	<i>Pounds.</i>	<i>Pounds.</i>		
France	2,172	498	\$6,836	\$3,222
United Kingdom . .	524,540	311,230	912,320	735,644
Other countries . . .	45,593	14,168	68,669	32,107
Total	{ lbs. 572,305 sq. yds. 2,378,719 }	{ 325,896 1,261,365 }	\$987,825	\$770,973
Tops, pounds (dutyable) .	<i>Pounds.</i>	<i>Pounds.</i>		
Hair of the Angora goat, alpaca, etc. (dutyable) .	82,913	22,583	\$101,422	\$26,655
Press cloth of camel's hair for oil milling purposes (free)		191,230	944,704	381,406
Wearing apparel (dutyable)			8,832,296	4,421,969
Rags, noils, and other waste (free)		1,730,608	1,302,843	1,233,422
Yarn, pounds (dutyable) .	689,007	507,767	1,165,895	972,858
All other manufactures of (dutyable)			6,660,353	708,265
Total manufactures of			\$27,476,798	\$13,279,481

COMPARATIVE STATEMENT OF IMPORTS AND EXPORTS OF
WOOL, Etc. — *Continued.*

EXPORTS OF WOOL AND MANUFACTURES OF.

FOREIGN.				
ARTICLES.	1918.	1919.	1918.	1919.
	Quantities.	Quantities.	Values.	Values.
WOOL, HAIR OF THE CAMEL, GOAT, ALPACA, AND OTHER LIKE ANIMALS, AND MANUFACTURES OF:				
UNMANUFACTURED—				
Wool of the sheep, hair of the goat, camel, and other like animals:				
Class 1—Clothing, lbs.	789,280	237,920	\$502,663	\$162,783
Class 2—Combing, "	44,450		32,448	
Hair of the Angora goat, al- paca, and other like ani- mals, lbs.	212,136	367,452	112,867	160,098
Class 3—Carpet, lbs.	1,000		280	
Total unmanufactured	1,046,866	605,372	\$648,258	\$322,881
MANUFACTURES OF—				
Tops		15		\$12
Carpets and carpeting—				
Carpets and rugs woven whole, sq. yds.	4,036	20,318	\$47,312	138,804
All other, sq. yds.	2,967	2,420	8,379	38,679
Cloths:				
Lbs.	3,927	2,375	6,508	6,151
Sq. yds.	7,428	1,662		
Cloth made of the hair of the Angora goat, alpaca, etc., lbs.,		252	9,927	565
Dress goods, women's and chil- dren's:				
Lbs.	423	3,804		
Sq. yds.	1,821	10,155	774	12,722
Press cloths of camel's hair, for oil milling purposes, lbs.		729	480	1,098
Rags, noils, and other waste		35,411	10,788	21,003
Wearing apparel			17,241	59,998
Yarn, lbs.	11,789	5,158	8,959	4,482
All other			36,421	8,682
Hair of the Angora goat, alpaca, etc., manufactures of				
Total manufactures of			\$146,789	\$292,190

COMPARATIVE STATEMENT OF IMPORTS AND EXPORTS OF
WOOL, Etc.EXPORTS OF WOOL AND MANUFACTURES OF.— *Concluded.*

DOMESTIC.				
ARTICLES.	1918.	1919.	1918.	1919.
	Quantities.	Quantities.	Values.	Values.
WOOL, AND MANUFACTURES OF:				
Unmanufactured, lbs.	993,143	545,717	\$916,506	\$550,772
Manufactures of —				
Blankets			\$2,444,460	\$924,308
Cloths and dress goods { lbs.	{	{ 4,594,415	{ 7,009,554	12,353,245
{ yds.	{ 5,388,452	{ 7,904,533		
Wearing apparel				
For men and boys			\$1,798,434	\$6,714,049
For women and children			1,503,091	1,901,480
Wearing apparel:				
Exported to —				
France			\$457,870	\$464,766
Italy			39,006	886,431
Netherlands				55
Russia in Europe			138,580	204,949
United Kingdom			74,419	271,405
Canada			1,807,648	1,860,543
Mexico			149,004	251,835
Cuba			91,025	115,393
Argentina			9,624	34,683
Russia in Asia			286	2,236,036
Other countries			533,263	2,269,433
Total wearing apparel			\$3,301,525	\$8,615,529
Woolen rage, lbs.	8,532,243	21,121,145	1,012,350	3,653,874
All other			3,981,932	5,700,266
Total manufactures of wool			\$17,749,821	\$31,247,222

WOOL AND MANUFACTURES OF, REMAINING IN WAREHOUSE
JUNE 30, 1918 AND 1919.

ARTICLES.	1918.	1919.	1918.	1919.
	Quantities.	Quantities.	Values.	Values.
WOOL, HAIR OF THE CAMEL, GOAT, ALPACA, AND OTHER LIKE ANIMALS, AND MANUFACTURES OF:				
UNMANUFACTURED —				
Hair of the Angora goat, alpaca, and other like animals (lbs.) . .	496,875	1,321,700	\$177,129	\$547,172
MANUFACTURES OF —				
Carpets and rugs woven whole, sq. yds.	46,980	21,086	\$247,191	\$222,407
Carpets and rugs, all other, sq. yds., Cloths:	13,099	4,765	30,600	27,081
Worsteds { Lbs.	29,589	46,394	57,519	112,556
{ Sq. yds.	42,342	85,430		
Woolens { Lbs.	67,107	57,756	118,156	90,578
{ Sq. yds.	142,724	60,144		
Cloths made of the hair of the An- gora goat, etc.	18,566	8,786	46,932	30,956
Dress goods, women's and chil- dren's:				
Lbs.	35,732	28,057	61,776	96,860
Sq. yds.	180,572	124,699		
Wearing apparel			77,598	123,669
Yarn (lbs.)	2,170	1,941	6,425	10,804
All other			28,087	934
Total manufactures of			\$674,284	\$715,845

QUARTERLY REPORT OF THE BOSTON WOOL MARKET FOR
JULY, AUGUST, SEPTEMBER, 1919, AND SEPTEMBER, 1918.

DOMESTIC WOOLS. (F. NATHANIEL PERKINS.)

	1919.			1918.
	July.	August.	September.	September.
OHIO, PENNSYLVANIA, AND WEST VIRGINIA.				
(WASHED.)	Cents.	Cents.	Cents.	Cents.
XX and above				78
X				*
1/2 Blood				*
"				*
"				*
Fine Delaine				90
(UNWASHED.)				
Fine Clothing	68	70	70	62
1/2 Blood, Staple	80	80	81	76
" "	72	70	70	76
" "	70	68	68	75
Fine Delaine	78	83	83	74
MICHIGAN, WISCONSIN, NEW YORK, ETC.				
(UNWASHED.)				
Fine Clothing	63 @ 65	63 @ 65	63 @ 65	61
1/2 Blood, Staple	75 @ 78	75 @ 78	75 @ 78	74
" "	67 @ 70	67 @ 70	67 @ 70	75
" "	64 @ 67	64 @ 67	64 @ 67	74
Fine Delaine	75 @ 78	75 @ 78	75 @ 78	72
KENTUCKY AND INDIANA.				
(UNWASHED.)				
1/2 Blood	75 @ 78	75 @ 78	75 @ 78	77
" "	70 @ 72	70 @ 72	70 @ 72	76
Braid	40 @ 45	40 @ 45	40 @ 45	68
MISSOURI, IOWA, AND ILLINOIS.				
(UNWASHED.)				
1/2 Blood	69	69	68	75
" "	68	67	66	74
Braid	42	41	40	66
TEXAS.				
(SCOURED BASIS.)				
12 months, fine and fine medium . .	160 @ 175	160 @ 175	160 @ 175	175
Spring, fine and fine medium . . .	135 @ 140	135 @ 140	135 @ 140	155
Fall, fine and fine medium	115 @ 120	115 @ 120	115 @ 120	150
CALIFORNIA.				
(SCOURED BASIS.)				
12 months, fine	170	170	165	175
Spring, fine	145	145	145	160
Fall, fine	130	130	125	147
TERRITORY WOOL: Montana, Wyoming, Utah, Idaho, Oregon, etc.				
(SCOURED BASIS.)				
Staple, fine and fine medium	185	185	185	180
Clothing, fine and fine medium . . .	165	165	160	*
1/2 Blood	180	180	175	168
" "	135 @ 140	135 @ 140	135	145
" "	115 @ 120	115 @ 120	110 @ 115	125
NEW MEXICO.				
(SCOURED BASIS.)				
No. 1	160	160	156	162
No. 2	150	145	140	150
No. 3	120	115	110	120
GEORGIA AND SOUTHERN.				
Unwashed	57 @ 62	57 @ 62	57 @ 62	67 @ 68

* But little in the market.

The second half of the season 1919 opened with a steady demand with prices on a high level, especially on fine and half-blood wools. One-quarter and three-eighths fleece wools were moving in good sized lines, and territory wools were being rapidly graded and shipped to merchants' respective customers. At this period it was believed that 90% of the Domestic clip of 1919 had moved out of growers' hands. Much of the early Territory wool was secured by merchants' early contracts. On the whole, growers received very substantial prices for their wools. Manufacturers continued to have a very strong demand for their goods, almost all available machinery being occupied to its full capacity. During the month of August there was less buoyancy to the market, fine and half-blood wools continuing to receive the most attention, while the lower grades, of both Domestic and Foreign, were much slower of sale. It is to be noted that scoured wools were in much lighter demand, as manufacturers, using these wools, had previously stocked up quite heavily. September opened with a generally quiet trade, opinion differing as to the strength of the market, some believing that it was a temporary lull and that later on an increased demand would occur. The wool auction sales, in London, at this period, gave a tone of confidence to holders of these wools, while medium wools were in comparatively light demand. Holders felt confident that this class of wool would, ere long, receive its share of attention and take its customary place in the looms of our mills. The attention of the trade was riveted on the proposed auction sales, to take place, in this country, under the care of London wool brokers — 40 000 bales of Australian and 10,000 bales of New Zealand to be sold by display, probably sometime in December.

F. NATHANIEL PERKINS.

Boston, September 24, 1919.

FOREIGN WOOLS. (MAUGER & AVERY.)

Scoured¹ Basis, 1919.

	1919.			1918.
	July.	August.	September.	September.
	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
Australian Combing:*				
Choice	210	210	210	100
Good	185	185	185	90
Average	165	165	165	85
Australian Clothing:				
Choice	180	180	180	92
Good	165	165	165	87
Average	160	160	160	70
Sydney and Queensland:				
Good Clothing	165	165	165	85
Good Combing	200	200	200	90
Australian Crossbred:				
Choice	90 @ 120	85 @ 120	85 @ 120	105
Average	85 @ 110	80 @ 100	80 @ 100	100
Australian Lambs:				
Choice	150	150	150	90
Good	145	145	145	87
Good Defective	130	130	130	75
Cape of Good Hope:				
Choice	175	175	175	75
Average	150	150	145	60
Montevideo:				
Choice	170	170	170	85
Average	160	160	150	80
Crossbred, Choice	125	125	120	85
English Wools,* Washed:				
Sussex Fleece		105	105	
Shropshire Hogs		98	98	
Yorkshire Hogs		51	51	
Irish Selected Fleece		68	68	
Carpet Wools:				
Scotch Highland, White				
East India, 1st White Joria	85	83 @ 85	83	
East India, White Kandahar	75	70	70	
Donskoi, Washed, White				
Aleppo, White				
China Ball, White				50 @ 55
“ “ No. 1, Open				45 @ 60
“ “ No. 2, Open				41 @ 46

* There were no Australian or English wools on the market.

FOREIGN WOOLS.

The demand for foreign wool during the past three months has been principally for fine wools, and strongest for wools of good staple and fine quality, which have been in very moderate supply.

There has also been a good inquiry for $\frac{1}{2}$ blood and $\frac{3}{4}$ wools, with a lessening demand for $\frac{3}{4}$ wool towards the end of the quarter, and very little inquiry for $\frac{1}{4}$ bloods, and below.

Carpet wools have been quite neglected, and the government auctions on low wools and inferior scoureds have shown a great lack of demand.

We have given quotations for English wools for August and September, as importations have been permitted by the British Government, but there

370 NATIONAL ASSOCIATION OF WOOL MANUFACTURERS.

are no supplies in this country yet. Quotations are based on cost, landed here.

There have been very few sales of India wool, and the quotations are quite nominal.

MAUGER & AVERY.

Boston, September 24, 1919.

PULLED WOOLS. (W. A. BLANCHARD.)

	1919.			1918.
	July.	August.	September.	September.
	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
Extra, and Fine A	160 @ 180	160 @ 180	160 @ 180	170 @ 175
A Super	140 @ 150	140 @ 150	135 @ 145	155 @ 160
B Super	120 @ 130	120 @ 125	115 @ 125	145 @ 150
C Super	90 @ 100	80 @ 90	80 @ 90	115 @ 130
Fine Combing	150 @ 160	150 @ 160	150 @ 155	165 @ 170
Medium Combing	125 @ 135	120 @ 130	120 @ 130	155 @ 160
Low Combing	100 @ 110	95 @ 105	90 @ 100	125 @ 140

PULLED WOOLS.

The quarter opened with good business, but mainly for the better grades. When these were sold out and the production was confined to lambs supers the demand declined and the last half of the quarter was dull with a sagging market. B Lambs, which are usually active at this season, were slow of sale, and accumulated in pullers' hands. Business between dealers fell off in anticipation of the resumption of auction sales by the Government in November, and manufacturers were disposed to limit their purchases for the same reason.

W. A. BLANCHARD.

Boston, October 3, 1919.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS
OF AUGUST 24, 1912.

Of Bulletin of the National Association of Wool Manufacturers, published quarterly, at Boston, Massachusetts, for October, 1919.

STATE OF MASSACHUSETTS } ss.
COUNTY OF SUFFOLK }

Before me, a Notary Public, in and for the State and county aforesaid, personally appeared Paul T. Cherington, who, having been duly sworn according to law, deposes and says that he is the Editor of the Bulletin of the National Association of Wool Manufacturers, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 443, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are:

Publisher, National Association of Wool Manufacturers, 50 State Street, Boston, Mass.

Editor, PAUL T. CHERINGTON, Secretary National Association of Wool Manufacturers.

Managing Editor, none.

Business Managers, none.

2. That the owners are (Give names and addresses of individual owners, or, if a corporation, give its name and the names and addresses of stockholders owning or holding 1 per cent or more of the total amount of stock):

The National Association of Wool Manufacturers, a voluntary association without capital stock, three principal officers being: *President*, Frederic S. Clark, North Billerica, Mass.; *Vice-Presidents*, William M. Wood, Boston, Mass.; George H. Hodgson, Cleveland, O.; Franklin W. Hobbs, Boston, Mass.; *Secretary and Treasurer*, Paul T. Cherington, Boston, Mass.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are (If there are none, so state):

There are no stockholders or bondholders, mortgagees or other security holders.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

5. That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is _____
(This information is required from daily publications only.)

PAUL T. CHERINGTON.

Sworn to and subscribed before me this 22d day of September, 1919.

(SEAL)

WILLIAM R. BURKE.

(My commission expires January 16, 1925.)

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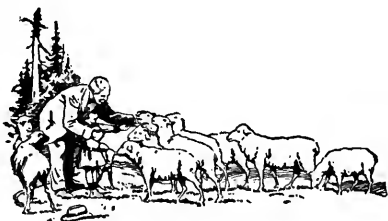
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"Yarn and Cloth Making," review of, by William D. Harts-horne	125
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Employment not known	40
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Deceased	16
Total	372

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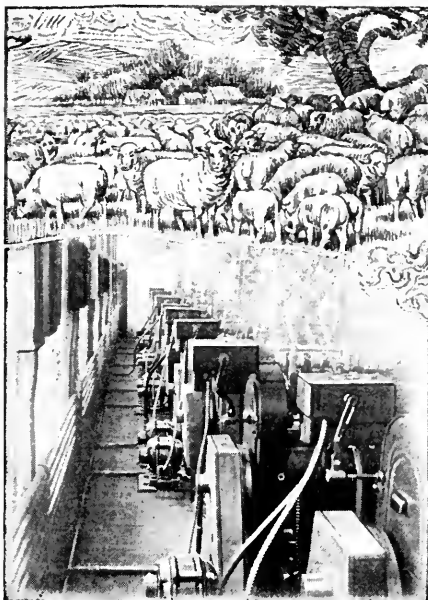
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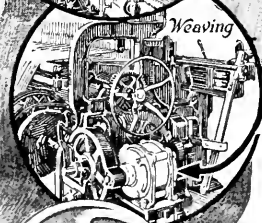
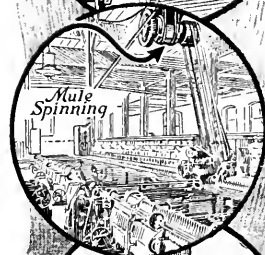
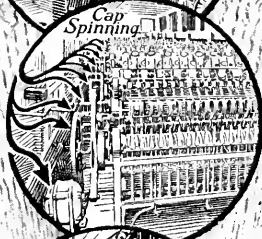
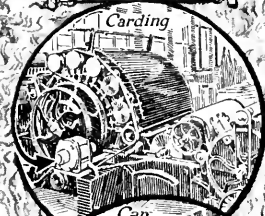
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